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An Analysis of the Maine Skiing Industry

Maine Department of Commerce and Industry

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I INTRODUCTION

A. Purpose and Objectives

This analysis of the skiing industry in Maine was conducted during the winter of 1970-71, to identify and evaluate the magnitude and impact of this activity in Maine and to give an indication of its significance in the economic well being of Maine's people and in the use of her natural resources. Prior to this study, little reliable information existed concerning the true volume, rate of growth, or the economic impact and implications of the Maine ski industry. It was generally felt that the industry was growing but little else was known. As a result, it has been difficult to take any intelligent action in matters concerning the skiing industry. Hopefully, a better understanding of the industry will be useful in decision making in the future.

There are many groups that can benefit from a better understanding of the Maine ski industry. State agencies are concerned with the role they should assume relative to vacation travel in general and skiing in particular. The Governor and other leading public figures have expressed a need for information which could be used as a basis for more rational public policy, resource allocation and regional planning.

Some conservationists are concerned that new developments are damaging the landscape and that areas are growing so rapidly that there is truly a danger to the wilderness. Others believe that a ski area may be more ecologically desirable than a factory that creates the same economic impact.

The people of the State are concerned with employment and economic activity and yet, there has been no data to identify whether ski areas offer viable alternatives to other types of employment or whether expenditures made by skiers in communities throughout the State create jobs.

Ski area operators and owners themselves, have expressed a need for information about the industry. Operators are perenially faced with expansion decisions such as whether to add facilities or services and what kind of expansion is best for business and profits. Managers want more information about profit centers in order to determine which facilities and services produce the greatest percentage of profit. They also seek better information on where skiers come from and what they feel is most important about the areas where they ski. Answers to these and other questions are of real interest to ski area operators.

The information contained in this report should serve as a beginning for more rational planning, for better allocation of the State's precious natural resources and for more intelligent management of the State's existing ski areas.

B. Background

While there is a serious lack of detailed information about all phases of the economic impact of vacation travel in Maine, the limited economic data available such as tax receipts and employment figures from lodging and eating establishments indicates that vacation travel is growing and it does have a significant economic impact on the State. Much of this impact is felt during the summer months along a relatively narrow strip of coast from Kittery to Bar Harbor. Assuming that the positive economic benefits derived from vacation travel activities are desirable, it would be advantageous to encourage these activities during the other three seasons of the year and in other sections of the State. The development and promotion of the ski industry provides an opportunity to increase vacation travel revenues during the presently dormant winter season.

The development of an active skiing industry would also, more equitable, distribute the vacation travel revenues among various regions of the State. Many of the State's skiing areas are located in the interior regions away from the coast. This would mean that much of the economic impact of skiing activity would be felt in the relatively quiet interior zone. This activity would lessen the widely varying swings in cyclical employment thereby creating more stable economic conditions in these areas.

C. Scope and Procedure

The research conducted in this study provides the first detailed set of data identifying who skis in Maine, why, and what overall impact he has on the economy. This study was not intended to survey the potential skier market. Earlier studies have confirmed its existence and identified its size and characteristics.

There are many sources of information about skiing in Maine. Ski area operators can provide information about their operations. To obtain information about skiers, it is necessary to address them directly. To gather the necessary information, it was decided to use several questionnaires. Limited resources precluded the use of direct interviews. The following questionnaires were used to gather the information presented in this analysis.

1. Ski Area Facilities Survey - (See Appendix A, Exhibit A-1) - This questionnaire was designed to gather detailed information about facilities and services at Maine ski areas. The questionnaire was mailed to all ski area operators.

2. Boston Ski Show Survey - (See Appendix A, Exhibit A-2) - Questionnaires were distributed to persons who visited the Maine Ski booths at the

show. This survey was directed at exploring the relationship, if any, between skiing in Maine and skiers at the Boston Ski Show. The purpose was to determine what proportion of skiers in the Boston area ski in Maine and whether or not skiing patterns of these skiers were the same as Maine skiers. Theoretically, this show could be used by Maine operators as a bellwether for the subsequent season.

3. Overnight Skier Survey - (See Appendix A, Exhibit A-3) - Questionnaires were distributed to overnight guests at lodging accommodations in the immediate vicinity of the Saddleback, Sugarloaf and Squaw ski areas. The survey sought to gather information about spending patterns, facility preferences, income, general occupations, exposure to advertising and residence of overnight skiers. The main objective in gathering this information was to derive a profile of the Maine overnight skier and his expenditure patterns.

4. Statewide Ski Census - (See Appendix A, Exhibit A-4) - The other surveys used for this analysis were directed at gathering information about a ski trip on the entire season. The ski census was designed to gather information about a single day. Although results could have been influenced by weather, school vacation schedules and other temporary phenomenon, the census was valuable in that it provided statewide information about activity on a single skiing day. The census explored such things as the number of skiers, the origin of skiers, methods used to estimate skier attendance, weather and skiing conditions, and expected attendance as opposed to actual attendance.

5. Post-Season Business Survey - (See Appendix A, Exhibit A-5) - This questionnaire was sent to owner-operators at the close of the season's activities. The Post Season Business Survey was an important part of the total industry analysis because it was a primary source of information

about revenues and overall ski area operations. The most reliable information about total revenues, employment and skier days results from this survey.

Each of the above questionnaires was designed with dual purposes in mind. First, each attempted to gather information about a slightly different aspect of the total skiing industry. Second, questionnaires were designed to gather the same information from different sources. This was done to double check the accuracy of information and to facilitate assembling the data to form a comprehensive picture of the total industry.

One example of cross checking is in the area of skier origin. In the Overnight Skier Survey, respondees were asked to supply their state of residence. In the Skier Census, owners were asked to count and list cars with out-of-state license plates. They were also asked to estimate the percentage of non-resident skiers. Finally, in the Post-Season Business Survey, owners were asked to estimate the percentage of the season's business that was attributable to non-resident skiers. Having several sources of the same information, it was possible to arrive at a relatively reliable figure for the percentage of non-resident skiers in Maine.

II SUMMARY

A. Findings

The results of this study were derived from information obtained from five separate surveys conducted during the period November 1970 through June of 1971. Each of these surveys are discussed separately in Chapters III through VII and collectively in Chapter VIII. The major findings, described in more detail in these chapters are summarized below.

1. Skiing

- A special one day census revealed that on a typical Saturday in January 1971, there were approximately 16,600 people skiing in Maine, about equal to the total population of Brunswick, Maine's ninth largest community.

- During the entire 1970-1971 season, Maine ski areas experienced a total of 663,100 skier-days. This is equivalent to the combined populations of Bangor, Brewer and Orono going to the slopes once each week throughout the skiing season.

- During the 1970-1971 season each skier spent an average of \$6.32 per skiing day at Maine's ski areas.

- Maine residents accounted for approximately 83% of the total skier days in Maine during the winter of 1970-1971 or almost five times the total attributed to non-resident skiers.

- Massachusetts alone accounts for over half of all non-resident skiers who come to ski Maine.

- During the 1970-1971 season, over 40 thousand people purchased skiing lessons at Maine's ski areas. This is almost equivalent to the total population of the City of Lewiston, Maine's second largest community.

2. <u>The Overnight Skier</u>

- Two thirds of the overnight skiers in Maine are non-residents who travel an average of 385 miles one-way to reach their skiing destination for an average stay of 5.8 days.

- Maine residents, who are overnight skiers, travel a surprising long 165 miles one-way to reach their destination for an average stay of only 3.1 days.

- The five factors most important to overnight skiers in choosing a ski area are trail characteristics, size of mountain, good lodging facilities, distance from home and type of lift equipment. These factors were ranked in this order of importance by residents and non-residents, alike.

- The average Maine overnight skier, both resident and non-resident alike, is a male about 28 years old who is married, employed and earns over $15,000 a year.

- More overnight skiers (38%) subscribe to Time than any other magazine. Other popular subscribers are Life (24%), Readers Digest (22%), Skiing (18%) and Ski (17%).

3. <u>Ski Area Operations</u>

- During the winter of 1970-1971, there were 45 ski areas open to the public in Maine, of which 10 were classified as major, 14 as regional and 21 as local. These 45 areas have the capacity to accommodate 30,400 skiers on a single day.

- All ski areas in Maine operated an average of 88 days during the 1970-1971 season. The ten major areas however, operated an average of 117 days or approximately 17 weeks.

- Although the 10 major areas represent less than one fourth of all ski areas in Maine, they have 45% of all ski lifts in the State, 51% of the total capacity, account for 62% of all skier days during the season, and receive 82% of total statewide ski area revenue.

- Although major ski areas capture approximately 81% of the statewide non-resident skier days, the non-residents provide only 34% of their total revenue.

- All ski areas depend on lift ticket sales, daily and seasonal, for over half their total annual revenue. Food sales, restaurant and snackbar, account for another 20%.

- Revenue from ski shop sales, equipment rentals, lessons and package plans represent 20% of the major ski areas total revenue compared to less than 4% at regional and local areas.

- Although several major ski areas operate during the summer and fall months, essentially to provide chair lift rides to vacation travelers, their total revenue during the May through October "off-season" represents only 5% of total annual revenue.

- Excluding season ticket sales, the primary source of off-season revenue at major ski areas is food and cocktails (58.7%) which is almost twice the revenue generated by lift ticket sales (30.6%).

- The estimated total gross fixed assets of all Maine ski areas was approximately $11.1 million dollars during the 1970-1971 season, with major areas accounting for about $8.9 million or 79% of the total.

- Total revenue of Maine's ski areas in 1970-1971 represented a return of 37.5 percent on total gross fixed assets which is slightly higher than the national average of 33.4%.

4. Economic Impact

- Each overnight skier in Maine, spends an average of $10.38 on mountain related items, $17.89 on area related items and $5.54 on season items or a total of $33.81 for each day of skiing in Maine.

- With respect to overnight skiers, Maine residents spend $38.17 per person per day compared to only $33.81 by non-residents. Expenditures by Maine residents were greater than those of non-residents in each of the three categories described above.

- Total revenue by all Maine ski areas during the 1970-1971 season was approximately $4.2 million, of which about $1.2 million or 29% was due to non-resident skiers.

- Total revenue in Maine from skiing during the 1970-1971 season was $11.0 million. Of this total, $4.2 million was derived from expenditures on mountain related items, $3.1 million from area related items and another $3.7 million from seasonal items.

- For every $1.00 that skiers spend at ski areas on mountain related items, they spend another $1.62 in the local area and elsewhere throughout the State.

- During the 1970-1971 season, Maine ski areas provided 102 year-round, full-time jobs and 738 seasonal or part-time jobs representing a total payroll of approximately $1.1 million.

- Considering total expenditures on mountain, area and seasonal items, it is estimated that skiing in Maine during the 1970-1971 season provided a total of $3.9 million in wages throughout the State.

B. Conclusions and Recommendations

1. Based on the relative size of the skiing industry in Maine compared to the neighboring states of New Hampshire, Vermont and even Massachusetts, the continued growth in the popularity of skiing throughout the nation; and the proximity of the State to the densely populated areas to the south; it is relatively safe to assume that skiing in Maine is in its infancy.

2. Based on the relatively high cost of skiing to the individual who participates and the fact that current skiing activity in Maine is predominantly the result of Maine resident participation, it would not be at all surprising to see in the coming years, a significant increase in the number of out-of-state skiers coming to Maine.

3. If by 1980 the ratio of non-resident skiers to resident skiers in Maine should reach half that of the current ratio in Vermont, it would mean over an eightfold increase in non-resident skier days if the resident skier days showed no increase.

4. Although the relatively fewer major areas in Maine currently dominate the industry, the characteristics of the existing trends in skier preferences and the economics of ski area operations indicate that in the future, major areas will plan an even more prominent role by capturing an increasingly larger share of the total market.

5. Based on the results showing the distribution of revenues, costs and return on gross fixed assets at various sizes of Maine ski areas, it is fairly apparent that it is economically more attractive for a regional area to expand into a major area than for a local area to expand into a regional sized area.

6. Examination of the differences in sources of revenues at various kinds of ski areas and their relative importance to the total revenue generating capacity, suggests that regional areas should carefully consider expanding their service facilities such as the ski shop, lessons, rentals, food and cocktails as an alternative to a capital investment in increased lift capacity.
7. The measurement of capacity in terms of "maximum number of skiers that can be accommodated on a single day" is inadequate for a more meaningful, continuing analysis of Maine's ski industry. All ski areas should become accustomed to expressing their capacity in terms of "total vertical transport feet per hour" a term commonly used throughout the United States.
8. The pilot skier census taken on January 30, 1971 was most successful and should not only be repeated each year but expanded to an "all areas-every day-all season" basis as currently being done in Vermont.

III MAINE SKI AREA FACILITIES SURVEY

A. Survey Procedures

A survey of Maine ski area facilities was not originally planned as part of the overall study, but in attempting to obtain a better understanding of the total skiing industry in Maine, it became apparent quite soon that complete and detailed information about the industry was lacking. For example, it was necessary to know not only the number of areas but also data concerning capacity, available services, lift equipment, and so forth, in order to better understand the capabilities and potential of the industry.

To obtain the necessary information, a special questionnaire was designed as shown in Appendix A, Exhibit A-1. This form was sent to ski area managers of every known area.

Since this was the first attempt to determine a set of comprehensive data about Maine ski areas, the questionnaire was made as simple as possible and did not address more difficult subjects as trail gradients, capacity in terms of vertical transport feet per hour, and other technical data.

B. Classification of Ski Areas

Initial analysis of the completed facility questionnaires indicated a system for classifying ski areas was needed for there were significant differences among the ski areas in terms of size, facilities available and services offered. The largest areas, as one would expect, have the most extensive facilities and account for most of the statewide skiing activity. Although many of the smaller areas are important to their local areas, they do not have a significant impact on the total economy of the State.

Analysis of the returned forms showed that Maine ski areas could be simply grouped into three categories based on the type of available lift equipment. The results of this general grouping is shown in Table III-1

Table III-1 CLASSIFICATION OF MAINE SKI AREAS 1970-71

Type Area	Number	Lifts	Facilities	Type of Skiing
Major	10	Chairs	Extensive	Full Range
Regional	14	T-Bars	Varied	Some with Expert
Local	21	Tows	Modest	Less Challenging
	45			

During the winter of 1970-1971, there were ten ski areas in Maine which could be listed in the major category. All of these areas had chair lifts including one with a gondola lift. In addition, these areas offered a full range of skiing trails from novice to expert and had extensive facilities such as restaurants and/or complete snack bars.

Lift equipment at regional areas is generally limited to T-Bars, or their equivalent. The facilities at the fourteen regional areas in Maine are not usually as extensive and the range of trails are not as varied as at the major areas. Only a few regional areas, for example, have expert trails.

The twenty-one local areas in Maine have only rope tow lifts. Some do not have a base lodge or snack bar facilities and, skiing is usually limited to a few short trails.

C. Summary

There were 45 ski areas open to the public in Maine during the 1970-1971 season as shown in Table III-1. Of these, 10 were major, 14 regional and 21 were local. In addition, there were seven private ski areas in

Maine which were not open to the public and, consequently, were excluded from this study.

Capacity has been defined here, simply as the maximum number of skiers that can be comfortably accommodated by a ski area on a single day. Capacity figures vary greatly among Maine's 45 ski areas from 2,500 people at Maine's largest major areas to 50 at the smallest local area. Average reported capacity figures for the three types of areas is shown in Table III-2.

Table III-2 DAILY SKIER CAPACITY OF MAINE SKI AREAS (1970-1971)

Area Type	Total Skier Capacity[1]	Percent of Total Capacity	Average Area Capacity	Percent of Total Number of Areas
Major	15,455	50.8	1,545	22.2
Regional	9,800	32.2	700	31.1
Local	5,150	17.0	245	46.7
Total	30,400	100.0	676	100.0

[1] Maximum number of skiers that can be accommodated on a single day.

The results indicate that the ten major Maine ski areas represent less than one fourth of all areas, but have over half of the total statewide skier capacity. On an average basis, the daily capacity of the major areas is over twice that of the regional areas and over six times that of the local areas.

Vertical descent is another means of providing an indication of the relative size of ski areas. The results of the survey shown in Table III-3 indicate the same kind of distribution as with capacity and lift equipment, namely, that the major areas are the largest.

Table III-3 MAXIMUM VERTICAL DESCENT OF MAINE SKI AREAS

Area Type	Total Vertical Descent	Percent of Total	Average Vertical Descent
Major	11,227	50.3	1122.7
Regional	7,494	33.6	535.3
Local	3,578	16.1	179.0
Total	22,299	100.0	

The major areas which are located at the largest mountains have, as one would expect, the longest vertical descents. Over half of the total vertical descent in the State is found at the ten major areas and their average descent is twice that of the regional area average. Similarly, the average regional area descent is three times that of the local areas.

Table III-4 shows that almost half of all lifts in Maine are located at the ten major areas and that the most common type of lift at both major and regional areas is the T-Bar. The local areas have only rope tows and therefor, it is not surprising that over three fourths of this type of lift are located at these areas.

Table III-4 LIFT CHARACTERISTICS OF MAINE SKI AREAS, 1970-1971

	Type of Lift					
Area Type	Gondola	Chair	T-Bar	Rope Tow	Total	Percent of Total Lifts
Major	1	14	17	4	36	45.0
Regional	0	0	17	4	21	26.3
Local	0	0		23	23	28.7
Total	1	14	34	31	80	100.0
Percent of Total	1.2	17.5	42.5	38.8	100.0	

The results of the facilities survey show that Maine has a full range of skiing areas from the large total facility areas visited by many out-of-state skiers, to the numerous small or local areas used primarily by

community residents and novice skiers.

Lack of sufficient data does not permit a detailed analysis of the growth in the number of ski areas in Maine. It is known that many of today's major areas started as regional and local areas and it is logical to assume that with the addition of services and facilities, existing regional areas will become major areas in the future. In fact, such a transition occurred since this study was completed. During the summer of 1971, one of Maine's regional areas added a one mile long chair lift and a three and one half mile long novice-intermediate trail. In a like manner, some local areas can be expected to expand and be classified as regional areas in the future.

A comparison of the number of lifts in Maine and the other New England states (see Table III-5) shows that Maine ranks fourth with 10.8 percent of all lifts in New England. Only Connecticut and Rhode Island have fewer lifts than Maine.

It is interesting to note that on a per capita basis, Maine ranks third in lift density behind the popular skiing states of Vermont and New Hampshire each of which have over 200 lifts compared to only 80 for Maine. Although it is unlikely that Maine will have 200 or more lifts in the near future, the indications are that skiing activity in Maine is growing at a faster rate than her New England neighbors.

Later in Chapter VI, it will be shown that business at Maine ski areas was up 35 percent in 1970-71 over 1969-70. Figures for Vermont and New Hampshire indicate an increase of only 12 percent in both of these states.

Table III-5 DISTRIBUTION OF SKI LIFTS IN NEW ENGLAND, 1971-1972

	Number of Lifts		Population in Thousands	
State	Total	Percent	Total	Per Lift
New Hampshire	230	31.2	738	3.2
Vermont	209	28.4	445	2.1
Massachusetts	180	24.4	5,689	31.6
Maine	80	10.8	994	12.4
Rhode Island	19	2.6	950	50.0
Connecticut	19	2.6	3,032	159.6
Total	737	100.0	11,848	16.1

IV BOSTON SKI SHOW SURVEY

A. Survey Procedures

The survey of attendees at the 1970 Boston Ski Show was conducted during the period of October 22 through the 25th. Data was collected using the short prepared questionnaire shown in Appendix A, Figure A-2. These questionnaires were distributed on a non-selective basis to people who stopped at the State of Maine booth located at one end of a short aisle containing six other Maine exhibitors. No attempt was made to push the questionnaires but, rather, people were asked whether they would like to assist in a research project only after they had stopped. They eagerly cooperated and only on rare occasions refused to participate. A total of 787 completed questionnaires were received in 30 hours of "show time" for a rate of 1 every 2.2 minutes.

B. Survey Results

Because the Boston Ski Show is the largest of its kind in New England, it is not difficult to understand why returns from non-residents ran ahead of those from Maine respondents. Since the show was held in Boston, the focal point of the New England ski market, almost all of the forms were from non-residents. The average age of all respondents was 25.7 which compares favorably with several other studies which have found the average age to be about 26.

An overwhelming number of people who filled out the questionnaire skied at least one time during the previous ski season (see Table IV-1).

Table IV-1 TOTAL SKIING PARTICIPATION AND ACTIVITY OF 1970 BOSTON SKI SHOW ATTENDEES

	Percent Did Not Ski Previous Season	Did Ski Previous Season	
		Percent	Skiing Days
Maine Residents	3.7	96.3	22.1
Non-Residents	7.2	92.8	24.0

Ninety-six percent of Maine residents and 92.8 percent of non-residents stated that they had skied during the previous winter of 1969-70. Of the people who skied in 1969-70, Maine residents stated that they had skied an average of 22.1 days and non-residents, an average of 24.0 days.

These results indicate that a significantly large percentage of ski show attendees were actual skiers and very few were casual observers.

The survey results also showed that of the non-residents that skied during the previous 1969-70 season, 36.1 percent skied in Maine. (See Table IV-2). This rather high percentage is somewhat surprising considering the fact that Vermont and New Hampshire are considered the primary destinations for many Boston area skiers. This indicates that Maine is relatively popular at least as an alternative destination to Vermont and New Hampshire.

Table IV-2 MAINE SKIING PARTICIPATION AND ACTIVITY OF 1970 BOSTON SKI SHOW ATTENDEES

Skier Origin	Percent Did Not Ski in Maine Previous Season	Did Ski in Maine Previous Season			
		Percent	Total Skiing Days	Maine Skiing Days	Percent Day in Maine
Maine Resident	3.7	96.2	22.1	19.8	89.6
Non-Resident	63.9	36.1	23.9	5.6	13.4

Non-resident skiers attending the Boston Ski Show averaged 5.6 days in Maine. As logically expected, a greater percentage of Maine residents skied in Maine (96.2 percent) for an average total of 19.8 days. Also, as expected, Maine residents spent 89.6 percent of their skiing days in Maine, while non-residents spent only 13.4 percent.

In a general way, the results of the ski show questionnaire served as a forecasting tool for the upcoming ski year. Responses on the survey indicated that skiing activity would increase greatly during the 1970-71 season (see Table IV-3). Maine residents estimated that they would ski an average of 31.8 days in Maine, an increase of 60.6 percent over the previous year. Non-residents estimated that they would ski an average of 10.6 days for an increase of 89.3 percent over the 1969-70 season. Reports from many areas indicate that the 1970-71 season was much better than the previous year. A rough comparison of total revenues shows an increase of 36 percent over the previous year.

Table IV-3 COMPARISON OF MAINE SKIING ACTIVITY OF 1970 BOSTON SKI SHOW ATTENDEES, 1969-70 AND 1970-71

	Average Skiing Days		
Skier Origin	Actual Maine Days 1969-70	Estimated Maine Days 1970-71	Anticipated Percent Increase
Maine Resident	19.8	31.8	60.6
Non-Resident	5.6	10.6	89.3

Question #4 addressed skier preferences. Each questionnaire listed twelve area-related characteristics. Respondents were asked to pick the three that were most important to them in choosing a place to go for a skiing weekend or vacation. Table IV-4 lists the twelve items and their ranking for non-residents only. There were so few responses from residents that no analysis was done on the data from this group.

Table IV-4 FACTORS IMPORTANT TO BOSTON SKI SHOW NON-RESIDENTS IN CHOOSING A SKI AREA

Factors Important in Choosing a Ski Area	Rank	Percentage of Respondents
Trail characteristics	1	82.1
Distance from home	2	60.2
Type of lift equipment	3	52.8
Size of mountain	4	49.5
Condition of roads to area	5	32.5
Good lodging facilities	6	27.4
Social and night life	7	18.2
Ski school	8	12.3
Other outdoor activities	9	6.3
Good restaurants	10	6.1
Local shops	11	5.0
Equipment rentals	12	2.7

The four items receiving the greatest number of checks in order were: 1) trail characteristics, 2) distance from home, 3) type of lift equipment, and 4) size of mountain. These four factors were checked by at least half of the non-residents that filled out survey forms.

This same question was included on the overnight ski survey to be discussed in Chapter VI. The ranking of items by skiers at the mountain was only slightly different for skiers staying overnight at the mountain. This group tended to rank mountain characteristics ahead of any other factors.

A comparison of the classification of respondents on the basis of skiing activity, indicates a distinct similarity between the percentage breakdown of respondents on the Boston Ski Show and the overnight skier survey.

The Boston Ski Show is a meeting place for avid New England skiers. The overhwelming majority of respondents had skied over 20 days during the previous season. An analysis of responses indicates that skiers at the Show are representative of the general Maine skiing public. As a result, show surveys could be used to guage skier altitudes prior to a given season. It should be remembered, however, that the ski show questionnaire was short and that the survey comprises only a small portion of the total ski survey efforts.

V SKIER CENSUS SURVEY

A. Survey Procedures

The state-wide census of skiers at all Maine ski areas was conducted on Saturday, January 30, 1971, a typical mid-winter weekend day. Copies of the survey form (see Appendix A, Exhibit A-3) and a letter instructing managers to estimate the number of skiers at a peak period of the day, were mailed to all areas prior to this date. Table V-1 summarizes the various methods used by area operators in estimating their attendance. At all but the smallest areas, arriving at an accurate estimate of skiers is difficult. A tally of daily ticket sales provides only partial information because many skiers hold season passes. A count of cars in the parking lot is only partially useful because the number of cars must be multiplied times an average number of passengers per car and it does not account for people that were dropped off for the day.

Table V-1 METHODS USED BY SKI AREAS TO DETERMINE SKIER ATTENDANCE, January 30, 1971

Method Used	Percent of Areas
Ticket sales count plus estimate of season pass holders	62.5
Actual head count	18.7
Number of vehicles times average number of passengers	9.4
General estimate based on past experience	9.4
	100.0

The majority of Maine operators based their figures on ticket sales plus an estimate of season pass holders present. Aside from actually counting each individual in some manner, this is probably the quickest and most accurate way of estimating attendance.

The skier census was taken to gather information about skiing in Maine on a given day. It was a pilot effort staged to determine the feasibility of the census technique. Prior to this survey, no information was available on the number of people that ski on any particular day during the skiing season. Another important part of the survey dealt with the origin of skiers. The skier census was to be the primary source of data concerning the numbers and the origin of out-of-state skiers at Maine areas on a particular day.

It is important to have this information because it provides a stop action picture of what is happening throughout the State at a given time. The post season business survey discussed later in this report asks questions about operations and revenues for the entire year, but it gives little information about what happens on a day-to-day basis. The census provides insight on the kind of day that is typical of those that make up the year's activities.

The census data is also useful to provide insight into the use of the state's facilities. It helps to answer questions like: Are all areas in the State full to capacity on a good weekend? Does any type of area show better use of capacity than the others? What is the difference in use of facilities between a weekend and a weekday? Year-end surveys can ask about the total volume of skier days, but it cannot examine the day-to-day dynamics which the census is designed to uncover.

In order to estimate conditions on an ideal day under the optimum conditions, operators were asked to compare actual attendance with their estimate of expected attendance under optimum conditions. (See Question #7, Appendix A, Exhibit A-3). They were also asked to report on actual weather and skiing conditions on the day of the census. With this data, it was possible to report on actual attendance under actual conditions and with data from Question #7, it was possible to estimate what attendance would have been under the best of conditions.

In addition to questions about attendance and conditions, operators were also asked to estimate the percentage of non-resident skiers. Information about out-of-state residents is valuable for several purposes. It is useful to managers in designing promotional campaigns. It provides some feedback on the success of past promotional efforts. It indicates how far people are willing to travel to ski at Maine areas. The distribution of Maine to out-of-state skiers is useful in planning facilities that may be needed by one type of group of another.

The ski census was a success. It provided much needed information about attendance and origin of skiers. Response was complete enough to permit accurate estimates for those areas which did not respond.

B. Survey Results

The response from area operators was good. A total of 68.6 percent of the areas returned survey forms representing 81.9 percent of the statewide skiing capacity (See Table V-2). Four regional areas that did not report accounted for about half of the total missing capacity, eleven local areas accounted for the rest.

It was more unfortunate that the eleven local areas did not report than the four regional areas. The local areas that did not report represented over 50 percent of their total, while the regional areas represented only about 29 percent of their total. As a result, it is more reliable to estimate for the missing regional areas than it is for the missing local areas.

Table V-2 MAINE SKI AREAS PARTICIPATING IN SKI CENSUS

	Type of Ski Area			
Total Ski Areas in Maine	Major	Regional	Local	Total
Number	10	14	21	45
Percent of total	22.2	31.1	46.7	100.0
Capacity	15,650	9,800	5,150	30,600
Percent of total	51.1	32.0	16.9	100.0
Areas Reporting on Census				
Number	10	11	10	31
Percent of type	100.0	78.6	47.6	68.6
Capacity	15,650	6,900	2,500	25,050
Percent of type	100.0	70.4	48.5	81.9

As was the case during much of the entire 1970-1971 ski season, skiing and weather conditions in most of the state were near perfect on the day of the census. The only factor that kept the day from being perfect was the cold weather. Tables V-3 and V-4 show the replies of area operators with respect to weather and skiing conditions. Almost 70 percent of the ski areas reported clear weather or scattered clouds, namely excellent weather for skiing in both cases. Over 75 percent of operators reported either excellent or good to excellent skiing conditions. In short, overall skiing conditions could not have been much better at a majority of Maine areas.

Table V-3 SKI CENSUS WEATHER CONDITIONS
JANUARY 30, 1971

Weather Conditions	Percent of Total Reported Capacity
Clear	39.4
Scattered Clouds	30.3
Partly Cloudy	9.1
Overcast	9.1
Rain	0
Sleet	0
Snow	12.1
	100.0

Table V-4 SKI CENSUS SKIING CONDITIONS
JANUARY 30, 1971

Skiing Conditions	Percent of Total Reported Capacity
Excellent	56.7
Good to Excellent	20.0
Good	13.3
Fair to Good	6.7
Fair	3.3
Poor to Fair	0
Poor	0
	100.0

In an effort to obtain the maximum amount of information about skier attendance from a single survey, three basic kinds of figures have been used; 1) reported attendance, 2) estimated attendance, and 3) expected attendance. Before discussing the actual figures, a brief explanation of these calculations is in order.

1. Reported Attendance - These are the actual figures provided by the operators.

2. Estimated Attendance - Using reported figures as a basis, estimated values were calculated for areas that did not return census forms. These estimates were based primarily on skier capacity, and secondarily, on any other special conditions that might affect attendance at a particular non-reporting area. For example, if an area with a capacity of 1000 skiers did not report, its attendance for that day was estimated on the basis of percent of capacity in attendance at other areas of the same type and general size. Because of the relatively good response, both in terms of number of areas and total capacity reported, the estimated attendance accounts for only 18.1 percent of the total attendance figure. Thus, an error as large as 25 percent in the estimated column would cause only a 4 to 5 percent error in the total attendance figure.

3. Expected Attendance - Expected attendance figures were calculated to determine how many people would have been skiing under optimum weather and skiing conditions. These figures were calculated using percentages supplied by area operators in response to Question #7 which asked them to compare their actual attendance on that day with what they would expect under the best possible skiing and weather conditions. Percentage figures from this question were applied to the actual count of skiers from Question #4.

Table V-5 shows that reported attendance on the day of the census was 12,004 skiers. This represented 52.7 percent of total capacity at

major areas but it did not give an accurate figure for the State because reports were not received from all regional and local areas.

Table V-5 SKI CENSUS ATTENDANCE
JANUARY 30, 1971

	Type of Area			
	Major	Regional	Local	Total
Reported Attendance				
Number	8,137	2,732	1,135	12,004
Percent of Type Area Capacity	52.7	27.8	22.0	39.5
Percent of Total That Reported	67.8	22.8	9.4	100.0
Estimated Attendance				
Number	8,137	5,055	3,443	16,639
Percent of Type Area Capacity	52.7	51.6	66.9	54.7
Percent of Total Estimated	48.9	30.4	20.7	100.0
Expected Attendance				
Number	8,661	5,749	4,125	18,535
Percent of Type Area Capacity	56.1	58.7	80.1	61.0
Percent of Total Expected	46.7	31.0	22.3	100.0
Rated Capacity				
Capacity	15,450	9,800	5,150	30,400
Percent of Total	50.8	32.2	17.0	100.0

Estimating for the areas that did not report, it was calculated that 16,639 people were skiing at Maine areas on the day of the census. The percentage distribution of estimated skiers by area, closely parallels percentage distribution of rated capacity. The major areas have 50.8 percent of total capacity and they had 48.9 percent of total skiers on census day. The same close relationship was true for regional and local areas. Regional areas have 32.2 percent of total capacity and they had 30.4 percent of total

skiers. Local areas have 17 percent of total capacity and they had 20.7 percent of total estimated skiers. This relatively equitable distribution of skiers by type of area seems logical. There is no reason to believe that any one type of area should draw a greater percentage of skiers relative to capacity than the other areas under the same weather and skiing conditions.

The local areas had slightly more of their rated capacity in use on the day of the census than did either the regional or the major areas. While the local areas were ahead with 66.9 percent of rated capacity in use, the other two areas were both over 50 percent filled.

Comparing Maine and Vermont on the day of the census shows that Vermont areas reported 42,500 skiers as compared with 16,639 in Maine. This amounts to about 2.6 times more skiers in Vermont than in Maine. This ratio is comparable to the fact that Vermont has two and a half times as many lifts as Maine.

Because it appeared that it would be difficult to conduct many such census surveys during the year and because weather and skiing conditions vary greatly during the season, a question was included to guage what attendance would have been under the best of conditions. Calculation of this expected attendance figure was discussed earlier and, because weather and skiing conditions were actually quite good, there is little difference between the estimated and expected attendance figures. On a perfect skiing day, 18,535 people would be skiing at Maine areas. This would fill over 60 percent of the total statewide capacity. Almost 50 percent of the total number of skiers would be at the major areas.

An important function of the census was to supply information about the origin and distribution of non-resident skiers. To obtain the distribution values, operators were asked to estimate the percentage of total skiers that were out-of-state residents and to count cars in the parking lot and

record the number from each state and province. This information was used to determine the approximate percentage that could be applied to the total out-of-state figure to calculate the number of people that came from each point of origin. This calculation was necessary because few operators have accurate information about the number of people per car. Neither method is totally accurate, only experience and intuition can help an operation to estimate the percentage of non-resident skiers. Counting cars is not accurate because the number of passengers per car can vary significantly. Also, there are always some cars with out-of-state plates belonging to students who attend school in Maine but have not traveled from their state of residence on the day they appeared in the ski area parking lot. While there were minor discrepancies between the estimated out-of-state skiers and the number of out-of-state cars in the parking lot, the majority of the data was quite accurate.

Table V-6 shows that on census day, Maine areas were primarily patronized by Maine residents. Out-of-state residents at major ski areas was 28.5 percent of the total skiers. It should be pointed out that this is an average figure and that some larger major areas reported 40 to 50 percent non-resident skiers. The smaller areas reported as few as 15 percent. Regional and local areas had considerably fewer non-resident skiers, namely an average of 9 percent out-of-state skiers at regional areas and only 2 percent at local areas.

The average of 28.5 percent non-resident skiers at major areas is somewhat lower than expected. Vermont, for example, calculates that approximately 88 percent of skiers on any given day are from out-of-state. Attendance could have been affected in Maine on census day by a number of factors such as good weather and skiing throughout New England and the generally good conditions that prevailed for most of the 1970-1971 season which might have discouraged skiers from traveling long distances since skiing was good close to home.

Table V-6 RESIDENCY OF ESTIMATED SKIER ATTENDANCE
January 30, 1971

	Type of Area			
Resident Skiers	Major	Regional	Local	Total
Number	5,818	4,595	3,371	13,784
Percent of Area	71.5	91.0	97.9	82.9
Percent of Total	42.2	33.3	24.5	100.0
Non-Resident Skiers				
Number	2,319	460	72	2,851
Percent of Area	28.5	9.0	2.1	17.1
Percent of Total	81.4	16.1	2.5	100.0
All Skiers				
Number	8,137	5,055	3,443	16,639
Percent of Area	100.0	100.0	100.0	100.0
Percent of Total	48.9	30.4	20.7	100.0

It is not surprising that major areas attracted 81.4 percent of all non-resident skiers. By definition, major areas have the extensive facilities that attract non-resident skiers. It is unlikely that non-resident skiers would travel long distances to ski at Maine's regional and local areas. Many of these skiers can find areas similar to these close to their homes in other states.

The majority of out-of-state skiers come from Massachusetts. Table V-7 shows that on the day of the census, over 60 percent of out-of-state skiers came from this primary market area. Of the Canadian provinces, Quebec led with 3.2 percent of total non-resident skiers. Over 77 percent of out-of-state residents came from Massachusetts, New Hampshire and Connecticut. Only 4 percent of total non-resident skiers came from origins in Canada.

Table V-7 ORIGIN OF NON-RESIDENT SKIERS

Origin	Estimated Number of Non-Resident Skiers	Percent of Total
Massachusetts	1,733	60.7
New Hampshire	242	8.4
Connecticut	233	8.2
Quebec	91	3.2
Rhode Island	87	3.0
New York	70	2.5
New Brunswick	14	.5
Vermont	13	.5
Nova Scotia	5	.2
Other U.S.A.	358	12.6
Other Canada	5	.2
	2,851	100.0

There is very little comparative data, but it seems logical that Massachusetts should account for the majority of out-of-state skiers. The number of cars from any particular area can vary depending on skiing conditions throughout New England and the U.S. Although these figures are for just one day — they probably do represent the distribution for the entire season.

VI OVERNIGHT SKIER SURVEY

A. Survey Procedures

The overnight skier survey was conducted to obtain information about skiers themselves, during the height of the season. This was the only questionnaire of its type used in gathering information in this analysis of the ski industry. The Boston Ski Show Survey was completed primarily by skiers before the season began, while information about operations was supplied by managers and operators after the season was over. Aside from the economically unfeasible method of direct interviews, the overnight skier survey was the most practical way of getting current information from skiers.

The object of this questionnaire was to gather information to be used to assemble a profile of the person who stays overnight at Maine ski areas. Many states have information about who skis; about how much they spend on such things as lodging, lift tickets, etc.; about why skiers prefer certain areas over others; and about origin of skiers.

This and other related information is useful to area operators and to states that are involved in promoting skiing operations. Prior to this analysis, very little of this information was available for Maine areas.

The overnight skier survey form was distributed by inns, motels and lodges that provide lodging accommodations to skiers at the Saddleback, Sugarloaf and Squaw ski areas. Innkeepers were encouraged to offer forms to all skiers who were staying overnight regardless of age or sex in order to more accurately measure per person rather than per party or per family expenditures. Completed forms were returned to the innkeepers or mailed directly to the Maine Department of Economic Development. Forms were available for distribution during all of January, February and March of 1971.

B. Survey Results

1. Magazine subscriptions - Because the Department of Economic Development spends money promoting skiing in national magazines, a question addressed at finding out about subscriber patterns was included. The question asked, "To what magazines do you currently subscribe?"

The overnight skiers surveyed indicated that they subscribed to 117 different magazines. Since many magazines were mentioned just one or two times, only those that were mentioned 8 or more times (comprising 67 percent of all total responses) were considered in this analysis. A ranking of magazines mentioned eight or more times is listed in Table VI-1. Time magazine was subscribed to by 37.8 percent of all overnight skiers, which was a larger percentage than that for any other magazines mentioned. On the other hand, the two skiing magazines mentioned, namely, Skiing and Ski were subscribed to by approximately the same number of skiers, 18.2 percent and 16.9 percent, respectively.

Table VI-1 MAGAZINES SUBSCRIBED BY MAINE OVERNIGHT SKIERS

Rank	Magazine	Percentage of Overnight Skiers
1	Time	37.8
2	Life	24.4
3	Readers Digest	21.8
4	Skiing	18.2
5	Ski	16.9
6	National Geographic	13.3
7	Newsweek	9.3
8	Sports Illustrated	8.9
9	Down East	5.3
10	McCalls	4.9
11	Ladies Home Journal	4.0
11	Playboy	4.0
13	Good Housekeeping	3.6
13	Outdoor Life	3.6
13	Better Homes and Gardens	3.6

There is little surprising about the results from this question. It is well known that Time is one of the most read magazines in the country and one would expect that skiers would subscribe to two leading ski magazines.

2. Awareness of "Ski Me." Advertising - To guage the success of Maine's ski promotion efforts, the question was asked, "Had you seen SKI ME. advertising before coming here on this trip? If yes, where?" Almost three quarters (72.1%) of the overnight skiers reported that they had seen or heard "Ski Me." advertising before coming to the area. (See Table VI-2). The leading contributor to this exposure was billboards which were mentioned by over 34 percent of all respondents. Magazine advertisements were almost as successful since 30 percent of respondents reported seeing SKI ME. advertisements in this popular media. Bumper stickers and newspaper advertisements each accounted for approximately 13 percent of total exposure.

Table VI-2 AWARENESS OF SKI ME. ADVERTISING BY MAINE OVERNIGHT SKIERS

Awareness	Percent of Overnight Skiers
Had seen SKI ME. advertising before trip	72.1
Had not seen SKI ME. advertising before trip	27.9
	100.0

Billboards were a major source of exposure because SKI ME. ads appeared on billboards in two strategic locations. The Maine billboard located on the busy Fitzgerald Expressway in downtown Boston, has become a virtual landmark in the Greater Boston area. It is not unlikely that everybody in Boston that drives a car has seen this sign at one time or another. Sugarloaf U.S.A., has several billboards that have carried SKI ME. advertising from time to time. These are located on Interstate 95 in New Hampshire and Maine, a route used by skiers coming through Kittery from major metropolitan areas to the south.

Table VI-3 SOURCE OF SKI ME. EXPOSURE TO MAINE OVERNIGHT SKIERS

Rank	Source		Percent of Overnight Skiers
1	Billboards		
	No specific location	13.3	
	Boston	12.1	
	Maine Turnpike	9.2	
	Total Billboards		34.7
2	Magazine Advertisements		30.1
3	Bumper Stickers		13.9
4	Newspaper Advertisements		13.3
5	Other		18.5

3. Season Passes - A question addressed at season pass holders was included in order to obtain more information about this group. Aside from the total number of passes sold at areas throughout the State, there was very little data about the season pass holder.

Table VI-4 shows that 70.1 percent of all overnight skiers did not hold season passes. As might be expected, the percentage of season pass holders was greater among Maine residents staying overnight at Maine ski areas than among non-residents staying overnight in Maine, only 13 percent of non-resident overnight skiers held season passes while approximately 35 percent of Maine overnight skiers held season passes. These percentages are somewhat higher than originally expected for overnight skiers staying at lodges and inns. Many people buy season tickets because they expect to ski frequently and the season pass allows them to ski less expensively. Following this reasoning, one would expect perhaps to find most season ticket holders at more economical lodging accommodations such as cottages rented for the winter and in their own homes, not at expensive nightly accommodations. This may indicate that Maine skiers, contrary to what was

expected, may have more money to spend than a typical skier based on a national average. They plan to ski and spend more, including expenditures for overnight lodging.

Table VI-4 SEASON PASSES HELD BY MAINE OVERNIGHT SKIERS

	Percent Maine Residents	Percent Non Residents	Total
Have a season pass to a Maine ski area	34.8	4.0	20.0
Have a season pass to an out-of-state ski area	0	9.0	9.9
Have a season pass to some ski area	34.8	13.0	29.9
Do not have a season pass to any ski area	65.2	87.0	70.1
	100.0	100.0	100.0

A closer look at the group of individuals who do hold season passes shows that Maine residents held season passes to Maine ski areas. Of the non-residents, 4 percent of all overnight skiers (30 percent of season pass holders) had passes on Maine areas while over twice as many were pass holders at out-of-state areas. It is logical that Maine residents would hold more season passes at Maine areas than non-residents. It is encouraging that almost one third of out-of-state residents who own season passes, held passes to Maine areas. This large number could have been due to the relatively good conditions reported by Maine areas during the winter of 1969-1970 as the sale of season tickets is usually influenced by conditions of the previous winter rather than by conditions during the winter in session.

4. Boston Ski Show - The Boston Ski Show is the largest ski show in New England. Maine ski area operators have annually debated the importance of the show on their attendance figures. At the show, Maine is in direct competition with the other New England skiing states and it is questioned whether this is to Maine's advantage.

The results from this question (See Table VI-5) show that less than 10 percent of overnight skiers had attended the Boston Ski Show. Almost twice as many non-residents attended the show than did residents. This is to be expected since the show is held in the Greater Boston area, the primary origin of overnight skiers. At first glance, it appears that few overnight Maine skiers actually attend the ski show in Boston, and therefore, its value appears questionable.

Table VI-5 BOSTON SKI SHOW ATTENDANCE BY MAINE OVERNIGHT SKIERS

	Percent Maine Residents	Percent Non-Residents	Total
Did not attend Boston Ski Show	94.6	90.9	92.0
Did attend Boston Ski Show	5.4	9.1	8.0
Total	100.0	100.0	100.0

A closer examination reveals that almost as many overnight skiers attended the ski show as saw the SKI ME. billboard in Boston, namely 9.1 and 12.1 percent, respectively. Considering that the ski show lasted only for a few days while the billboard was up for several months, it appears that the Boston Ski Show is almost equally effective as the Boston billboard in attracting overnight skiers to Maine.

5. Origin of Maine Overnight Skiers - Information about the origin of skiers is concern for various reasons, for advertising, for planning accommodations and facilities, and for determining characteristics of skiers at particular areas. To gather information about origin, respondents were asked to list the state and county where they were currently residing.

Results from this question show that a majority of skiers were either Maine residents or non-residents from Massachusetts. (See Table VI-6).

Each state supplied 32.2 percent of the total number of overnight skiers which is about 5 times the number of skiers that came from Canada or New York, the third and fourth ranked places of origin.

Table VI-6 ORIGIN OF MAINE OVERNIGHT SKIERS

Rank	State	Ski Area: Saddleback	Sugarloaf	Squaw	Total
1	Maine	28.4	19.3	52.2	32.2
1	Massachusetts	44.6	30.7	20.3	32.2
2	Canada	5.4	11.2	8.8	8.2
3	New York	1.3	12.5	4.3	6.5
4	New Jersey	4.1	8.0	5.8	6.1
5	Connecticut	6.8	1.1	4.3	3.9
6	New Hampshire	2.7	2.2	4.3	3.0
	Other	6.7	15.0	0	7.9
		100.0	100.0	100.0	100.0

The percentage of Maine residents varied significantly among the three areas surveyed ranging from over 50 percent at Squaw Mountain at Moosehead to only 19.3 percent at Sugarloaf U.S.A. This variation is most likely due to location and distance from out-of-state metropolitan areas.

For example, the data in Table VI-6 shows a decreasing percentage of Massachusetts skiers at Saddleback, Sugarloaf and Squaw which are progressively further north from Boston. Squaw Mountain is the furthest away from the major Maine and out-of-state population centers, as a result, skiers from the Boston area are less reluctant to travel the distance and many Maine skiers prefer to stay overnight than to make the long round-trip drive in one day. This probably accounts for the large number of Maine overnight skiers responding to the questionnaire at Squaw. Sugarloaf and Saddleback are closer to Maine and out-of-state population centers; as a

result, fewer Maine skiers stay overnight in relation to out-of-state skiers. Probably the reason that only 19.3 percent of the overnight skiers at Sugarloaf were from Maine is because this area is an attraction and it draws a greater percentage of non-resident skiers than any other single area in the State. This raises the percentage of out-of-state overnight skiers, thereby lowering the percentage of skiers from Maine.

The percentage of Massachusetts overnight skiers at the three areas surveyed seems to illustrate the point that the further north the area, the fewer the number of skiers from the relatively close metropolitan areas, 44.6 percent of the skiers at Saddleback were from Massachusetts, 30.7 percent of skiers at Sugarloaf were from Massachusetts and only 20.3 percent of the skiers at Squaw were from Massachusetts.

Sugarloaf's status as a major attraction, is supported by the fact that a greater percentage of skiers from New York and New Jersey were present than at the other two areas. The reason for this could be that Sugarloaf is indeed a major destination area that offers a broad variety of accommodations for ski vacations and long weekends. Distance is much less a factor to a person with a few extra days, than it is for the weekend skier. As a result, the skier on vacation from the Mid-Atlantic states would tend to choose Sugarloaf.

Sufficient data on county of origin was not obtained to permit meaningful analysis. The limited data available reflected an expected pattern, namely, that the majority of Massachusetts residents were from the populous Suffolk and Middlesex Counties, while the majority of Maine skiers were from Cumberland County which contains the Greater Portland area.

6. Average Length of Visit - Overnight skiers were asked how many days they planned to ski at that area during that visit. The results shown in Table VI-7, indicate that more non-resident skiers were on week-long ski trips than Maine residents. The data also shows that Maine skiers who stay

overnight, stay approximately twice as long at Sugarloaf than they do at either Squaw or Saddleback. This suggests that Maine residents patronize Sugarloaf more for week-long vacations and Squaw and Saddleback primarily for weekends and holidays.

Table VI-7 LENGTH OF VISIT BY MAINE OVERNIGHT SKIERS

Skier Origin	Average Length of Visit in Days			
	Saddleback	Sugarloaf	Squaw	Total
Maine Residents	2.9	5.7	2.6	3.1
Non Residents	5.4	6.2	5.6	5.8

Figures for non-resident average days indicate a fairly uniform week-long stay at each of the three areas surveyed with a slightly longer stay at Sugarloaf than at Saddleback and Squaw.

7. Distance Traveled - Overnight skiers were asked how far they had come to ski on the trip for which they were responding. The responses give some indication of who skis at the three areas surveyed. Table VI-8 shows, as expected, that non-residents traveled over twice as far to ski in Maine than did Maine residents. What was not expected was the 165 mile one-way distance traveled by Maine residents to ski. This seems to indicate that Maine overnight skiers come from far corners of the State. The average distance of 165 miles traveled by Maine skiers is approximately the distance from Portland to Squaw or from locations in York County to the three principal areas.

Table VI-8 DISTANCE TRAVELED BY MAINE OVERNIGHT SKIERS

Skier Origin	Average One-Way Distance Traveled in Miles			
	Saddleback	Sugarloaf	Squaw	Total
Maine Residents	121.3	105.4	204.0	164.8
Non-Residents	310.6	453.3	346.1	385.6

The data shows that Sugarloaf attracts a wide variety of skiers. The average one-way distance traveled by Maine residents at Sugarloaf is less than that for either Squaw or Saddleback, indicating that Sugarloaf draws overnight skiers that live fairly close to the mountain. On the other hand, non-residents traveled further, on the average, to ski at Sugarloaf than they did to ski at Squaw or Saddleback. Again, the probable reason for this is that Sugarloaf has an apparently recognized status of a major destination ski area. The average non-resident mileage figure is low at Squaw probably because many non-resident skiers come to this area from nearby points in Canada which are relatively closer than the large population centers of Portland, Boston and others further south.

8. Participation and Activity - Question #7 on the questionnaire asked skiers whether or not they skied at least once during the previous 1969-70 ski season (See Table VI-9). The results showed that there is virtually no difference between resident and non-resident overnight skiers in these participation and activity rates. Approximately 90 percent of both groups had skied an average of 17 to 18 days during the previous season.

Table VI-9 TOTAL SKIING PARTICIPATION AND ACTIVITY OF MAINE OVERNIGHT SKIERS

	Percent Did Not Ski Previous Season	Did Ski Previous Season	
		Percent	Skiing Days
Maine Residents	10.1	89.9	17.8
Non-Residents	11.1	88.8	17.0

Question #8 was closely related to Question #7 and asked of those who had skied during the 1969-70 season whether or not they had skied in Maine. An overwhelming 98.4 percent of Maine residents indicated that they had skied in their home state the previous season (See Table VI-10). A much lower 54.8 percent of non-residents stated that they had skied in Maine

during the 1969-1970 season. Conversely, this means that an encouraging 45.2 percent of the non-resident overnight skiers represented new business for the Maine ski areas surveyed.

Table VI-10 MAINE SKIING PARTICIPATION AND ACTIVITY OF MAINE OVERNIGHT SKIERS

Skier Origin	Percent Did Not Ski in Maine Previous Season	Did Ski in Maine Previous Season			
		Percent	Total Skiing Days	Maine Skiing Days	Percent Days in Maine
Maine Resident	1.6	98.4	17.8	16.6	97.7
Non-Resident	45.2	54.8	17.0	7.4	40.2

Maine residents skied an average of 16.6 or over 97 percent of their total skiing days in Maine, while non-residents spent a somewhat lower 7.4 or about 40 percent of their total skiing days in Maine. If these numbers are valid, it would seem to indicate that despite the much larger number of skiing areas in Vermont and New Hampshire to choose from, non-residents who ski in Maine tend to return the following year.

The respondents were also asked to give estimates of their anticipated total skiing activity for the current 1970-1971 season. The results are shown in Table VI-11. Residents estimated that they would ski an average of 25.6 days, and non-residents estimated an average of 21.5 days. In terms of percentages, this is equivalent to a 43.8 percent increase in 1970 for residents and a 26.5 percent increase for non-residents over the previous year.

In addition, respondents were asked to estimate their anticipated skiing activity in Maine. Table VI-11 shows that a 38.5 percent increase for resident skier days and a 13.5 percent increase for non-resident skier days was planned. It is possible that the more favorable skiing conditions during the 1970-71 season at the time of the survey were responsible for the

sizable increase in the anticipated number of skier days. Snow and weather conditions were far more favorable for skiing in 1970-71 than during the previous season.

Table VI-11 COMPARISON OF MAINE SKIING ACTIVITY OF MAINE OVERNIGHT SKIERS 1969-70 AND 1970-71

Skier Origin	Average Total Ski Days: Actual Total Days 1969-70	Estimated Total Days 1970-71	Anticipated Percent Increase
Maine Resident	17.8	25.6	43.8
Non-Resident	17.0	21.5	26.5

Skier Origin	Average Maine Ski Days: Actual Maine Days 1969-70	Estimated Maine Days 1970-71	Anticipated Percent Increase
Maine Resident	16.6	23.0	38.5
Non-Resident	7.4	8.4	13.5

9. Experience and Residency - Data pertaining to the skiing experience and residency of the survey respondents were grouped into three categories based on answers to Questions #7 and #8. The three categories were: 1) Repeat skiers - those who had skied at least once in Maine during the previous 1969-1970 season, 2) Unfamiliar skiers - those who had skied the previous season but not in Maine, and 3) New skiers - those who had not skied at all during the 1969-1970 season.

Table VI-12 shows that the majority of respondents were repeat skiers varying from just under 50 percent at Sugarloaf, to over 75 percent at Squaw. A large number of skiers at Sugarloaf were unfamiliar with Maine. This may be due to the activities associated with the World Cup Races which

were held there during February, 1971. Proportionately, more unfamiliar out-of-state skiers were probably drawn to Sugarloaf because of the publicity surrounding this event. The relatively high percentage of new skiers at Saddleback may be due to the fact that it is a popular family area and has a number of fine beginner and novice trails. Table VI-12 shows that 24.3 percent of all respondents at Saddleback were new skiers.

Table VI-12 EXPERIENCE AND RESIDENCY OF MAINE OVERNIGHT SKIERS

	Percent of Skiers at Maine Ski Areas			
Type of Skier	Saddleback	Sugarloaf	Squaw	Total
Repeat skier	59.5	45.6	75.4	58.2
Unfamiliar skier	16.2	50.0	19.7	30.7
New skier	24.3	4.4	4.9	11.1
Total	100.0	100.0	100.0	100.0
Residence of Skier				
Maine Resident	27.0	20.0	50.8	30.7
Non-Resident	73.0	80.0	49.2	69.3
Total	100.0	100.0	100.0	100.0

Non-resident skiers accounted for 69.3 percent of total returned forms. It was anticipated that a large percentage of the overnight skiers would be non-residents, but it was somewhat surprising to find that approximately 30 percent of overnight guests were Maine residents.

10. Drawing Factors - Question #9 of the questionnaire presented a list of twelve area-related items commonly considered when choosing a ski area to visit. This is the same list used in the survey conducted at the Boston Ski Show Survey. (See Appendix A, Exhibit A-1). Respondents were asked to indicate the three items that were most important to them in choosing an area for a weekend ski trip vacation.

The results shown in Table VI-13 indicate that the three most important factors in order of importance, are trail characteristics, size of mountain and good lodging facilities, respectively, for residents and non-residents alike. Distance from home and lift characteristics were ranked fourth and fifth by residents and non-residents alike. Interestingly, transportation factors such as distance from home and condition of roads to area were more important to Maine residents who traveled only an average of 165 miles to get to the area, than to non-residents who traveled on the average more than twice as far. (See Table VI-8). Items which ranked sixth or lower were significantly less important to the respondents and their ranking differed between residents and non-residents.

Table VI-13 FACTORS IMPORTANT TO RESIDENT AND NON-RESIDENT SKIERS IN CHOOSING A SKI AREA

Factor	Maine Residents Rank	Maine Residents Percent	Non-Residents Rank	Non-Residents Percent	All Skiers Rank	All Skiers Percent
Trail characteristics	1	56.1	1	63.2	1	61.0
Size of mountain	2	47.0	2	50.0	2	49.1
Good lodging facilities	3	47.0	3	47.4	3	47.2
Distance from home	4	36.4	4	28.3	4	30.7
Type of lift equipment	5	27.3	5	27.6	5	27.5
Social and night life	7	21.2	6	21.1	6	21.1
Condition of road to area	6	22.7	7	15.8	7	17.9
Ski school	11	4.5	8	14.5	8	11.5
Good restaurants	8	10.6	9	10.5	9	10.6
Local shops and services	10	6.0	10	5.9	10	6.0
Other outdoor activities	9	7.6	12	*	11	2.8
Equipment rentals	12	*	11	2.0	12	1.4

*Less than 1 Percent

Results from this question seemed to indicate that overnight skiers are in Maine to ski. They ranked the two major mountain-related skiing items first on the list, while away-from-the-mountain attractions were ranked lower in priority.

There were several distinct ranking differences among types of skiers. Trail characteristics, for example, was ranked most important by both repeat and unfamiliar skiers (See Table VI-14) while new skiers considered good lodging facilities as most important. This seems to be normal, for new skiers probably have not had much skiing experience and are not as concerned with trail configurations or the size of the mountain. A good beginner slope is all they probably need. Unfamiliar and repeat skiers, on the other hand, support the conclusion that true skiers are more concerned about the mountain.

Table VI-14 FACTORS IMPORTANT TO DIFFERENT TYPES OF OVERNIGHT SKIERS IN CHOOSING A SKI AREA

	Repeat Skiers		Unfamiliar Skiers		New Skiers		All Skiers	
Factor	Rank	Percent	Rank	Percent	Rank	Percent	Rank	Percent
Trail characteristics	1	68.6	1	60.0	3	38.0	1	61.0
Size of mountain	3	47.9	2	58.6	3	38.0	2	49.1
Good lodging facilities	2	50.4	3	38.6	1	71.4	3	47.2
Distance from home	5	29.8	4	31.4	2	42.9	4	30.7
Type of lift equipment	4	35.5	6	22.9	10	4.8	5	27.5
Social and night life	7	18.2	5	25.9	5	28.6	6	21.1
Condition of road to area	6	21.5	8	14.3	9	14.3	7	17.9
Ski school	10	6.6	7	18.5	7	19.0	8	11.9
Good restaurants	8	11.6	9	5.7	5	28.6	9	10.6
Local shops and services	9	9.1	11	1.4	10	4.8	10	6.0
Other outdoor activities	11	1.2	12	*	7	19.0	11	2.8
Equipment rentals	12	*	10	4.2	12	*	12	1.4

*Less than 1 Percent

These people are competent skiers and are drawn to the area by types and kinds of trails as well as vertical elevation. It is also most interesting to note that type of lift equipment is ranked fourth highest by repeat skiers, only sixth by skiers unfamiliar with Maine, and a low tenth by new skiers. Conversely, distance from home, night life and ski school are more important to those unfamiliar or new to Maine.

11. Mountain Related Expenditures - The survey results revealed that Maine overnight skiers, on a per person basis, spent 9.7 percent more on mountain related expenses than did non-resident overnight skiers (See Table VI-15). The figures do not clearly explain the reason for this, but residents spend approximately one dollar more than non-residents for both lift tickets and equipment rentals and, approximately one dollar less for ski shop purchases and lessons, combined. Several reasons can be postulated for a larger expenditure by Maine skiers. One is that they may buy proportionately more adult tickets which are more expensive than children's tickets, indicating perhaps that Maine overnight skiers cannot afford to bring their children along as compared to non-resident skiers.

Table VI-15 DAILY PER PERSON EXPENDITURES ON MOUNTAIN RELATED ITEMS BY MAINE OVERNIGHT SKIERS

Mountain Related Items	Daily Per Person Expenditures					
	Maine Residents		Non-Residents		Total	
	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total
Lift tickets	$ 5.81	51.5	$ 4.78	46.5	$ 4.91	47.3
Ski shop	1.00	8.8	1.85	18.0	1.71	16.5
Snack bar	1.61	14.3	1.66	16.2	1.64	15.8
Lessons	0.81	7.2	0.93	9.0	0.92	8.8
Equipment rental	1.24	11.0	0.49	4.8	0.60	5.8
Other	0.81	7.2	0.57	5.5	0.60	5.8
Total	$11.28	100.0	$10.28	100.0	$10.38	100.0

Another possible reason for the price differential would be in the sale of season passes. It was shown previously in Table VI-5 that Maine residents held more Maine season passes than did non-residents. If Maine residents do not utilize their season passes beyond the break-even point, then, their per day expenses would tend to be higher.

Still another possible explanation might be that Maine residents are less concerned with expenses when they stay overnight at a ski area, for it may be more of an occasional luxury than a practicality as for non-residents. Data shown later in Table VI-16, tend to support this hypothesis.

Table VI-15 shows that almost half of mountain related expenditures are for lift tickets. This is consistent with the data from the post season business survey discussed in Chapter VII which indicates that approximately 50 percent of earnings come from lift ticket sales. Purchases at the ski shop and the snack bar account for another 32 percent of skiers' expenditures on mountain related items.

12. Area Trip Expenditures - Items associated with trip expenditures in the area include money spent on food, lodging, entertainment, transportation and local purchases on a specific trip. The purchases of seasonal items such as skis and equipment are not included here but are discussed separately in the section on seasonal items.

The survey results show that expenditures by overnight skiers on food and lodging amount to almost 70 percent of their total area expenses during a typical visit. (See Table VI-16). Transportation is the next largest expense item accounting for 11 percent of the overnight skiers' dollars.

As with mountain related expenditures, Maine residents spend more (9.2 percent) on area related items than do non-residents. This tends to support the hypothesis drawn in the last section that Maine residents may stay overnight only occasionally and that when they do, they spend more money

on the basic items of lodging and food. This hypothesis is negated somewhat, however, by the data indicating that non-residents spend more on entertainment. This latter point, on the other hand, is most likely due to a slightly younger out-of-state skier who is more apt to be single and who tends to be more interested in night life than the slightly older Maine resident skier who is more apt to be married.

Table VI-16 DAILY PER PERSON EXPENDITURES ON AREA RELATED ITEMS BY MAINE OVERNIGHT SKIERS

Area Related Items	Daily Per Person Expenditures: Maine Residents		Non-Residents		Total	
	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total
Lodging	$ 7.86	41.4	$ 7.48	43.0	$ 7.83	42.2
Meals	5.10	26.8	4.60	26.4	4.70	27.0
Transportation	1.75	9.2	2.00	11.5	1.93	11.1
Entertainment	1.43	7.5	2.03	11.7	1.89	10.9
Local business	1.28	6.8	0.99	5.7	1.03	5.9
Other	1.58	8.3	0.30	1.7	0.51	2.9
Total	$19.00	100.0	$17.40	100.0	$17.89	100.0

No rational explanation can be given to explain why Maine residents spend significantly more on local business purchases and other items other than that previously stated, namely, that when Maine residents stay overnight at a ski area, they appear less cost conscious than non-residents.

13. Seasonal Expenditures - A word of explanation is appropriate before discussing the results shown on Table VI-17. Daily per person seasonal item expenditures were determined by dividing total seasonal expenditures in Maine and out-of-state by the number of days skied in Maine and out-of-state, respectively. For example, the total seasonal item expenditures made in Maine by non-residents were divided by the average number of days that non-residents skied in Maine to determine their average daily expenditures in Maine on seasonal items.

Table VI-17 DAILY PER PERSON EXPENDITURES IN MAINE ON SEASONAL ITEMS BY MAINE OVERNIGHT SKIERS

Seasonal Items	Daily Per Person Expenditures					
	Maine Residents		Non-Residents		Total	
	Dollars In Maine	Percent of Total	Dollars In Maine	Percent of Total	Dollars In Maine	Percent of Total
Ski equipment	$ 4.74	60.0	$ 1.30	24.7	$ 2.85	51.5
Ski clothing	1.31	16.6	.75	14.2	0.75	13.4
Seasonal lifts	1.41	17.9	.70	13.3	0.92	16.6
Club dues	0.02	0.3	.05	0.9	0.03	0.9
Other	0.41	5.2	2.47	46.9	0.98	17.6
Total	$ 7.89	100.0	$ 5.27	100.0	$ 5.54	100.0

A fairly obvious conclusion that can be drawn from the data shown on Table VI-17 is that skiers make the largest portion of their expenditures for seasonal items close to home. This is evidenced by the fact that Maine residents spend just about 50 percent more on seasonal items in Maine on a per person per Maine skiing day than do non-residents. Similarly, Table VI-18 shows that non-residents spend about eight times more on seasonal items out-of-state on a per person out-of-state skiing day than do Maine residents.

Tables VI-17, 18 and 19 show that ski equipment purchases account for well over half of the expenditures on seasonal items for both residents and non-residents alike. However, it is interesting to note that on a total Maine plus out-of-state basis (Table VI-18), non-residents spend far more on seasonal items than do Maine residents on a per day basis. The total for all seasonal items is 73 percent greater ($15.96 vs $9.24) for non-residents, compared to Maine residents.

Table VI-18 DAILY PER PERSON EXPENDITURES
OUT-OF-STATE ON SEASONAL ITEMS BY MAINE OVERNIGHT SKIERS

Seasonal Items	Daily Per Person Expenditures: Maine Residents: Dollars Out-of-State	Maine Residents: Percent of Total	Non-Residents: Dollars Out-of-State	Non-Residents: Percent of Total	Total: Dollars Out-of-State	Total: Percent of Total
Ski equipment	$ 0.58	43.0	$ 6.07	56.8	$ 5.68	60.0
Ski clothing	0.77	57.0	2.44	22.8	1.61	17.0
Seasonal lifts	0	0	1.57	14.7	1.57	16.6
Club dues	0	0	0.17	1.6	.17	1.8
Other	0	0	0.44	4.1	.44	4.6
Total	$ 1.35	100.0	$10.69	100.0	$ 9.47	100.0

Table VI-19 DAILY PER PERSON EXPENDITURES
IN AND OUT-OF-STATE ON SEASONAL ITEMS BY
MAINE OVERNIGHT SKIERS

Seasonal Items	Daily Per Person Expenditures: Maine Residents: Total Dollars	Maine Residents: Percent of Total	Non-Residents: Total Dollars	Non-Residents: Percent of Total	Total: Total Dollars	Total: Percent of Total
Ski equipment	$ 5.32	57.6	$ 7.37	46.2	$ 8.53	48.2
Ski clothing	2.08	22.5	3.19	20.0	2.42	20.4
Seasonal lifts	1.41	15.3	2.27	14.2	2.49	14.4
Club dues	.02	0.2	.22	1.4	0.20	1.2
Other	0.41	4.4	2.91	18.2	1.42	15.8
Total	$ 9.24	100.0	$15.96	100.0	$15.06	100.0

14. Total Expenditures - Summing daily per person expenditures by Maine and non-resident overnight skiers in Maine on mountain related, area trip and seasonal items (Table VI-20), Maine residents spend 15.8 percent

($38.17 vs $32.95) more on these items than do non-residents. This is to be expected as expenditures by Maine residents were greater on each of these three categories as previously discussed.

Table VI-20 shows that 52 percent of total daily expenditures by both resident and non-resident overnight skiers were for area related items. This corresponds almost identically with the results of the data from the Colorado Ski Survey[1] which showed that 52.4 percent of total daily expenditures went for area trip items. Expenditures on mountain related items account for 30.7 percent of total daily expenditures by Maine and non-resident overnight skiers. Again, this is consistent with data from other studies confirming that with respect to daily per person expenditures, skiers in Maine do not vary in any significant way from the national average.

Table VI-20 SUMMARY OF DAILY PER PERSON EXPENDITURES IN MAINE BY MAINE OVERNIGHT SKIERS

	Daily Per Person Expenditures					
	Maine Residents		Non-Residents		Total	
	Dollars In Maine	Percent of Total	Dollars In Maine	Percent of Total	Dollars In Maine	Percent of Total
Mountain Related Items	$11.28	29.6	$10.28	31.2	$10.38	30.4
Area Trip Items	19.00	49.7	17.40	52.8	17.89	52.3
Seasonal Items	7.89	20.7	5.27	16.0	5.54	17.3
Total	$38.17	100.0	$32.95	100.0	$33.81	100.0

[1] Colorado Ski and Winter Recreation Statistics, University of Colorado, 1971.

A figure that is commonly mentioned when discussing expenditures is the ratio of mountain related items to area trip items plus seasonal items (on-the-mountain vs off-the-mountain trip expenditures). This ratio can be calculated on the basis of information in Table VI-20. Adding per day trip items ($17.89) to per day seasonal items ($5.54) gives a total of $23.43 for total off-the-mountain expenditures. This figure, divided by average per day expenditures on mountain related items, results in a ratio of 2.26. The 2.26 ratio for Maine overnight skiers is slightly lower than the 2.78 figure for Colorado overnight skiers. This is probably due to the relatively higher transportation cost incurred by many overnight skiers at Colorado areas. Special airline fares for skiers have drawn skiers from all parts of the country to Colorado and other western areas, but even with special package prices, the cost of air transportation to Colorado is substantially higher than the overland cost to Maine from the major population centers of the east.

Table VI-21 TOTAL DAILY PER PERSON EXPENDITURES IN MAINE ON ALL ITEMS BY MAINE OVERNIGHT SKIERS DURING 1970-1971 SEASON

Item	Rank	Total Expenditure per Day	Percent of Total
Lodging	1	$ 7.44	23.2
Lift tickets	2	4.92	15.3
Meals	3	4.76	14.8
Ski equipment purchases	4	2.95	9.2
Transportation	5	1.85	5.7
Entertainment	6	1.81	5.6
Ski shop purchases	7	1.72	5.3
Snack bar	8	1.65	5.1
Ski clothing	9	1.20	3.7
Local business	10	1.04	3.2
Lessons	11	0.91	2.8
Seasonal lifts	12	0.83	2.6
Equipment rentals	13	0.61	1.9
Club dues	14	0.09	0.3
Other		0.42	1.3
Total		$32.20	100.0

Table VI-21 lists the individual items that are included in the three categories in Table VI-20. The items are ranked on the basis of expenditure. Overnight Maine skiers spent half again as much on lodging than they did on lift tickets, the second highest ranked item on the list. Expenditures on meals ran a close third to lift tickets.

15. Characteristics of Maine Overnight Skiers - Tables VI-22 and VI-23 describe the age, marital status, occupation and income levels of Maine overnight skiers, by sex and origin, respectively. Table VI-22, for example, shows that a male overnight skier is apt to be a 30 year old non-resident who is married and is employed, with an income over $15 thousand compared to the female overnight skier who, although is also apt to be a married non-resident, is more apt to be four years younger and a student. Similarly, Table VI-23 indicates that both Maine resident and non-resident skiers are apt to be employed, married males earning over $15 thousand a year.

Table VI-22 CHARACTERISTICS OF MAINE OVERNIGHT SKIERS BY SEX

Origin	Male Skiers	Female Skiers	Total
Resident	28.9%	35.6%	31.5%
Non-Resident	71.1	64.4	68.5
	100.0	100.0	100.0
Marital Status			
Single	38.8%	41.8%	39.8%
Married	61.2	58.2	60.2
	100.0	100.0	100.0
Employment			
Employed	71.9%	36.6%	57.6%
Student	26.4	34.1	29.6
Unemployed	1.7	29.3	12.8
	100.0	100.0	100.0
Income			
Under $5,000	5.8%	11.3%	7.6%
$ 5,000 - $ 9,999	22.1	28.3	24.2
$10,000 - $15,000	19.2	28.3	22.3
Over $15,000	52.9	32.1	45.9
	100.0	100.0	100.0
Age	30.5	26.1	28.6

Table VI-22 shows that the average age for male overnight skiers is 30.5 years while the average age for females is 26.1. Table VI-23 indicates that the average for both resident and non-resident overnight skiers is 28 plus years. This figure is slightly above the national average of 26 years. This is probably due to the fact that the data in this study came from overnight skiers who represent only a segment of the total skiing population. It is quite possible that the overnight skier may be slightly older than the average for all skiers.

Table VI-23 CHARACTERISTICS OF MAINE OVERNIGHT SKIERS BY ORIGIN

	Maine Resident Skiers	Non-Resident Skiers	Total
Sex			
Male	52.2%	59.7%	57.3%
Female	47.8	40.3	42.7
	100.0	100.0	100.0
Marital Status			
Single	34.3%	43.1%	39.8%
Married	65.7	59.9	60.2
	100.0	100.0	100.0
Employment			
Employed	47.5%	61.8%	57.6%
Student	37.3	26.4	29.6
Unemployed	15.2	11.8	12.8
	100.0	100.0	100.0
Income			
Under $5,000	2.6%	7.0%	7.6%
$ 5,000 - $ 9,999	23.1	23.9	24.2
$10,000 - $15,000	25.6	22.2	22.3
Over $15,000	48.7	46.9	45.9
	100.0	100.0	100.0
Age	28.3	28.7	28.6

Income data in Table VI-23 shows that about 70 percent of both resident and non-resident overnight skiers earn more than $10 thousand a year. There is little difference in the distribution of salary grouping for the two

groups. This table shows that overnight skiers earn above average incomes; almost 50 percent of all overnight skiers earn over $15 thousand a year. Employment data from the same table indicates that a greater percentage of Maine overnight skiers are students, while a greater percentage of non-resident overnight skiers are employed. The larger percentage of students among Maine residents could be due to the fact that students tend to have time and money to ski and they ski close to home. It could also be due to a greater number of pre-college age students who accompany their parents on ski trips.

VII POST SEASON BUSINESS SURVEY

A. Survey Procedures

Generally speaking, the results discussed in this section are an outgrowth of previous, less detailed post season business surveys conducted by the Maine Department of Economic Development. This particular survey was conducted to determine the number of people employed in the skiing industry, the dollar revenues generated by all ski areas and the total number of skier days skied during the year. In essence, this survey attempted to uncover information about operations and about revenues. This information was of interest because there were many unanswered questions about the ski industry and also, as mentioned in the introduction, without figures, it is difficult to make planning decisions such as determining how much should be spent to promote skiing in the State and the role that state government should assume with regard to the ski areas.

Is the industry growing? How does employment in the ski industry compare with manufacturing employment? Do they pay better wages? How important is off-season business in the State? Are summer operations as important as those in the winter? Are ski area owners and operators aware of their potential? The post season survey has been designed in an attempt to find answers to these and other similar questions.

The Post Season Questionnaire to survey the results of the 1970-1971 ski season was mailed to all operators and/or managers of Maine's ski areas. Each form was randomly coded to maintain strict confidentiality of information provided. The questionnaire and a cover letter were mailed in May, shortly after the close of the skiing season.

B. Survey Results

It seems to be an accepted fact that questionnaires designed to gather information about money and finances, have a lower response rate than general information-gathering questionnaires. Apparently, some ski area operators do not wish to divulge facts about financial operations because of established ownership policies, fear of disclosing competitive position or other understandable reasons. Returns on the post season business survey followed this traditional response rate pattern as shown on Table VII-1 and can be compared with the response rate from the ski census as shown previously in Table V-1.

Table VII-1 MAINE SKI AREAS PARTICIPATING IN 1970-1971 POST SEASON BUSINESS SURVEY

	Type of Ski Area			
Total Ski Areas in Maine	Major	Regional	Local	Total
Number	10	14	21	45
Percent of Total	22.2	31.1	46.7	100.0
Capacity	15,650	9,800	5,150	30,600
Percent of Total	51.1	32.0	16.9	100.0
Areas Reporting on Post Season Business Survey				
Number	8	7	5	20
Percent of Type	80.0	50.0	23.8	44.4
Capacity	13,400	4,300	1,700	19,400
Percent of Type	85.6	43.9	33.0	63.4

Although only 44.4 percent returned the post season business survey questionnaires, the response rate did not seriously affect the outcome of our study since those that responded represent 63.4 percent of the total capacity in the State. Even more important is the fact that the reported represented over 85 percent of the major areas capacity and they generate

approximately 82 percent of reported and estimated total State ski area revenues. Similarly, the seven regional areas that responded are typical of the complete range of areas in that category and allowed reasonable estimates to be made for those areas that did not report. The response from the local areas was low, but this was anticipated. Many of the local areas are operated on a non-daily, non-profit basis and they contribute a relatively small amount to the total Maine ski area revenue.

1. <u>Ski Area Operations</u> - The first question on the post season business survey consisted of ten parts and addressed the general area of ski area operations. Table VII-2 shows that a total of 444,000 daily lift tickets were sold during the skiing season. Major areas accounted for 78 percent of the total ski season lift tickets sold. A comparison of the total number of skiing season lift tickets sold (444,000) with total number of skier days (663,100) shows a discrepancy of 219,100 skier days. The obvious reason for this discrepancy are the skier days of season pass holders who do not buy daily lift tickets. The very nature of the season pass, namely, free access to lifts whenever they are running, makes it difficult to determine how many times a year these people ski.

By dividing the difference between total skier days and daily lift tickets sold by the number of season passes sold (219,100 ÷ 12,583) it is possible to calculate approximately the number of days skied by the season pass holder. The result is 17.4 days per year skied by season pass holders. This figure appears reasonable, for it is very close to the break-even number of days for a season ticket to be economical and similarly, is comparable to the 17.8 and 17.0 days quoted by resident and non-resident skiers, respectively. (See Table VI-9).

Table VII-2 MAINE SKI AREA OPERATIONS

	Type of Area			
	Major	Regional	Local	Total
Number of season passes sold				
Number	6,807	3,472	2,304	12,583
Percent of Total	54.1	27.6	18.3	100.0
Average per Area	687	248	110	280
Lift tickets sold (skiing season only)				
Number	346,000	84,000	14,000	444,000
Percent of Total	78.0	18.9	3.1	100.0
Average per Area	34,600	6,000	667	9,867
Lift tickets sold (off season)				
Number	16,000	0	0	16,000
Percent of Total	100.0	0	0	100.0
Average per Area	1,600	0	0	356
Lift tickets (yearly total)				
Number	362,000	84,000	14,000	460,000
Percent of Total	78.7	18.3	3.0	100.0
Average per Area	36,200	6,000	667	9,867
Ski package plans sold				
Number	6,109	46	0	6,155
Percent of Total	99.3	0.7	0	100.0
Average per Area	611	3	0	137
Number of people who purchased skiing lessons				
Number	37,822	1,672	1,042	40,536
Percent of Total	93.3	4.1	2.5	100.0
Average per Area	3,782	119	50	901
Total skier days				
Number	408,900	212,900	41,300	663,100
Percent of Total	61.7	32.1	6.2	100.0
Average per Area	40,890	15,207	1,967	14,736
Average operating days (skiing season)				
Number	117	78	45	88
Average skier days per skiing operation day				
Number	3,495	2,730	918	7,535

As mentioned above, Maine ski areas sold 12,583 season passes during the 1970-1971 season, with major areas accounting for over half of the state-wide total. Somewhat surprising is that the local areas sold 2,304 passes

or 18.3 percent of the statewide total. This would indicate that a larger proportion of skiers at local areas compared to major areas, are season pass holders. This may be due to the fact that season passes at local areas are less expensive than those at the larger regional and major areas, and that novice skiers take an active part in supporting their local areas.

Of all package plans sold, an overwhelming 99.3 percent were sold at the major areas. This is not totally surprising because the major areas, in general, have adequate lodging facilities to make package plan options feasible. It is somewhat surprising however, to find that only 0.7 percent of all package plans were sold at regional areas. Some of the regional areas in Maine are relatively large and do have comfortable lodging facilities nearby. Recognizing that many people learn to ski at local and regional areas, it is even more surprising to find that over 93 percent of skiing lessons were purchased at the major areas. Comparing the number of skiing lessons with the total lift ticket sales indicates that major ski areas sell one ski lesson for each ten lift tickets.

It is interesting to compare the percentage of skier days skied at the three general types of areas with their percentage of capacity figures. The State's major ski areas have 51.1 percent of the total capacity (Table VII-1), but they accounted for 61.7 percent of total skier days. This indicates that they do a business disproportionate to their size. It appears that they draw this business from the local areas. Table VII-1 shows that local areas have about 16.9 percent of total skiing capacity but they only account for 6.2 percent of total skier days. Regional areas appear to be holding their own as they have 32 percent of total capacity and they account for 32.1 percent of total skier days.

Of more than passing interest is the question of how well Maine ski areas are doing compared with other New England ski areas. With respect to skier days, the Vermont Economic Development Division reported 2,650,000

skier days at 77 Vermont areas for an average of 34,416 skier days per area during the 1970-1971 season. Maine, on the other hand, logged 663,100 skier days at 45 areas for an average of 14,736 skier days per area - about two and a third times fewer total skier days than Vermont.

Operating a ski area is clearly a seasonal venture for even the major areas which operate an average of 62 days during the off-season, are only open an average of 179 total days - not even half a year. Regional areas operate less than half as long and local areas only one fourth as long.

2. Growth of Ski Area Operations - Seven major areas reported reliable information for both the previous 1969-70 and the current 1970-71 season. Comparison of these data show increases in all ski season operations. The results shown in Table VII-3 indicate sizable increases in the number of ski package plans sold (50 percent), ski season lift tickets sold (33.5 percent), people who purchased skiing lessons (26.1 percent), operating days (25.8 percent), and skier days (21.0 percent). Comparison of the results with figures from several other sources, indicates that skier days in Maine increased almost twice that in Vermont which had a rise of 10.4 percent from 1969-70 to 1970-71. Increases in the number of skier days and in the other operational areas previously listed, can be attributed at least partially, to the exceptionally good skiing conditions.

Table VII-3 GROWTH OF MAJOR MAINE SKI AREA OPERATIONS, 1970-71 OVER 1969-70

Maine Ski Area Operations	Percent Change
Number of season passes sold	+ 7.2
Number of ski package plans sold	+ 50.7
Number of people who purchased skiing lessons	+ 26.1
Lift tickets sold (ski season)	+ 33.5
Lift tickets (off-season)	+ 6.7
Lift tickets sold (total)	+ 32.1
Estimated skier attendance	+ 21.0
Average operating days (ski season)	+ 25.8
Average operating days (off-season)	- 13.7
Average operating days (yearly total)	- 0.6
Average skier days per skiing operating day	- 3.8

Table VII-3 shows a decrease in only one area of operations, average off-season operating days. There is no clear reason for this decrease. The average number of days could be down, due to a shorter foliage season or to a drop-off in summer visitors. Several areas may have been closed while making major modifications on facilities.

3. Maine Ski Area Income - Tables VII-4, 5 and 6 present data from the survey related to ski area income. As indicated in Table VII-4, major areas accounted for 82 percent of reported and estimated income received by all Maine ski areas. Regional areas accounted for 16 percent of the total and local areas only accounted for 2 percent of the total. This magnitude of distribution of income among type of ski areas, is fairly consistent for most of the income-generating categories such as daily lift ticket sales, ski shops, skiing lessons, ski rentals, package plans and cocktails. To some extent, this is expected because some of these categories represent specialties of the larger areas. With other items, such as lift tickets, season passes and snackbar income, the percentage earned by major areas is below the overall average of 82 percent for total income. Major ski areas generated 100 percent of the restaurant income at Maine ski areas.

The largest source of income is from the sale of daily and seasonal lift tickets. All areas receive over half of their total income from the sale of daily and seasonal lift tickets. (See Table VII-5). The next largest source of income is from the sale of food. The results show that snackbar and restaurant sales account for approximately 20 percent of the total income of major and regional areas, and almost 30 percent of local area income. The remainder of the income is derived from rentals, ski shop sales and other miscellaneous income.

Table VII-4 MAINE SKI AREA INCOME

	Area Type			
	Major	Regional	Local	Total
Number of Areas	10	14	21	45
Daily lift tickets				
Income	1,413,500	311,100	20,700	1,745,300
Percent of Total	81.0	17.8	1.2	100.0
Average per Area	141,350	22,221	986	38,784
Season passes				
Income	450,400	179,500	23,300	653,200
Percent of Total	69.0	27.5	3.5	100.0
Average per Area	45,040	12,821	1,110	14,516
Restaurant				
Income	485,550	0	0	485,550
Percent of Total	100.0	0	0	100.0
Average per Area	48,555	0	0	48,555
Snack bar				
Income	232,800	133,900	22,300	389,000
Percent of Total	59.8	34.4	5.7	100.0
Average per Area	23,280	9,564	1,062	8,644
Ski Shop				
Income	289,500	2,400	1,600	293,500
Percent of Total	98.6	0.8	0.6	100.0
Average per Area	28,950	171	76	13,976
Skiing Lessons				
Income	151,300	11,100	35	162,435
Percent of Total	93.1	6.8	0.1	100.0
Average per Area	15,130	793	1.7	3,610
Ski Rentals				
Income	148,100	7,200	1,200	156,500
Percent of Total	94.6	4.6	0.8	100.0
Average per Area	14,810	514	5.7	3,478
Package plans				
Income	89,100	1,200	0	90,300
Percent of Total	98.7	1.3	0	100.0
Average per Area	8,910	86	0	3,763
Cocktails				
Income	81,000	0	2,000	83,000
Percent of Total	97.6	0	2.4	100.0
Average per Area	8,100	0	414	2,800
Other				
Income	99,300	25,500	6,800	131,600
Percent of Total	75.4	19.4	5.2	100.0
Average per Area	9,930	1,821	324	2,924
Total				
Income	3,440,500	671,900	77,935	4,190,335
Percent of Total	82.1	16.1	1.8	100.0
Average per Area	344,050	47,992	3,892	93,203

A word of explanation is in order about revenue from cocktails (Tables VII-4 and 5). Major areas account for 97.6 percent of total income from cocktails. Although this is not surprising, it is interesting to note that local areas accounted for 2.4 percent of cocktail income, while regional areas did not report any income from cocktail sales. A check on the original data sheets shows that all of the local area cocktail income was reported by one area in Northern Maine. Evidentally, this area is a popular social center as well as a skiing area.

It is also interesting to compare the percentage values shown on Table VII-4 with those presented previously on Tables VII-2. This comparison shows the close relationship between the percentage of items sold by type of area (Table VII-2) with the percentage of statewide income received from the sale of that item (Table VII-4). This data shows, for example, that major areas accounted for 81 percent of all daily lift income (Table VII-4) and 78.7 percent of lift ticket sales (Table VII-2). With respect to season passes, the major areas received 69 percent of the income (Table VII-2) but only 54.1 percent of the sales (Table VII-4). This is simply an illustration of the known fact that lift ticks and season passes are more expensive at major areas and correspondingly produce a larger share of income.

Perhaps, more significant is the implication on the relative lower cost of skiing at local areas. Comparing Table VII-2 with VII-4 shows that local areas account for only 1.2 percent of lift ticket income although their sales account for 3.1 percent of all lift tickets sold statewide. This difference in percentages is greater for season passes (only 3.5 percent of income, but 18.3 percent of sales) and even more so for lessons (0.1 percent of income, but 2.5 percent of sales).

Table VII-5 shows that there is a wide discrepancy among areas with respect to the percentage of income derived from various operations. For example, major and regional areas derive approximately 41-46 percent of

total income from lift tickets, while local areas only derive 25.3 percent of their income from this source. As has meen mentioned above, a possible explanation for this is that a large proportion of local area skiers support these local areas through the purchase of season passes.

Table VII-5 DISTRIBUTION OF MAINE SKI AREA INCOME

Item	Type of Area: Major	Regional	Local	Total
Daily lift tickets	41.1%	46.3%	25.3%	41.6%
Season passes	13.1	26.7	28.4	15.6
Restaurant	14.1	0	0	11.6
Snack bar	6.8	19.9	27.3	9.3
Ski shop	8.4	0.3	2.0	7.0
Skiing lessons	4.4	1.7	0.1	3.9
Ski rentals	4.3	1.1	1.5	3.7
Package plans	2.6	0.2	0	2.2
Cocktails	2.4	0	7.1	2.1
Other	2.8	3.8	8.3	3.0
Total	100.0%	100.0%	100.0%	100.0%

With the exception of the relatively lower percent of total income from daily lift tickets at local areas, their percentage of income from other factors is higher. This is probably due to the fact that there are fewer income generating areas at the local areas. For example, Table VII-5 shows that regional and local areas derive little or no income from restaurants, ski shop sales, skiing lessons, equipment rentals, or package plans. The income from these items is much more evenly distributed at the major areas.

Table VII-6 shows some general information about the distribution or origin of ski area from residents and non-residents. The allocation between residents and non-residents is based on individual estimates provided by each ski area surveyed. The results show that major areas received over 97 percent of the total statewide income from non-resident skiers and over 75 percent of statewide income derived from Maine resident skiers. It is

most interesting to note that although major areas attract over 97 percent of the statewide non-resident business, this non-resident business constitutes only about 33 percent of the total income of the major ski areas. On a much smaller scale, this relationship is reversed for the regional areas which received only 2.7 percent of the statewide non-resident business, which in turn, contributed 4.8 percent of total regional area income.

Table VII-6 ORIGIN OF MAINE SKI AREA INCOME

	Type of Area			
Dollars	Major	Regional	Local	Total
Maine Resident	$2,274,836	$639,782	$77,571	$2,992,189
Non-Resident	1,165,662	32,219	265	1,198,146
Total	$3,440,498	$672,001	$77,836	$4,190,335
Percent by Area				
Maine Resident	76.0	21.4	0.6	100.0
Non-Resident	97.2	2.7	0.1	100.0
Total	82.1	16.0	1.9	100.0
Percent by Residence				
Maine Resident	66.1	95.2	99.7	71.4
Non-Resident	33.9	4.8	0.3	28.6
Total	100.0	100.0	100.0	100.0

Only the major ski areas have any appreciable amount of business during the six months from May through October when there is no snow on the ground. The data in Table VII-7 shows that the major areas derive 5 percent of their income during this "off-season". The major off-season sources of income by the major areas are from season passes, restaurant, and daily lift sales in that order, when considering off-season dollar revenue. Characteristically, off-season income is usually associated with daily tickets sold to summer tourists and fall foliage spectators, and therefore, it is somewhat surprising to note that lift ticket income ($32,600) represents less than one-third of total off-season revenue after season pass sales are excluded (i.e. $106,400).

Table VII-7 SEASONALITY OF MAJOR AREA INCOME

Item	Six Month Off-Season (May-Oct.) $	%	Six Month Skiing Season (Nov.-April) $	%	Yearly Total (May-April) $	%
Daily lift tickets	32,600	2.3	1,380,900	97.7	1,413,500	100.0
Season passes	81,200	18.0	369,300	82.0	450,500	100.0
Restaurant	42,000	8.7	443,500	91.3	485,500	100.0
Snack bar	6,000	2.6	226,800	97.4	232,800	100.0
Ski shop	10,100	3.5	279,300	96.5	289,400	100.0
Skiing lessons	0	0	151,300	100.0	151,300	100.0
Ski rentals	0	0	148,100	100.0	148,100	100.0
Package plans	0	0	89,100	100.0	89,100	100.0
Cocktails	14,400	17.8	66,600	82.2	81,000	100.0
Other	1,300	1.3	98,000	98.7	99,300	100.0
Total	187,600	5.0	3,252,900	95.0	3,440,500	100.0

It should also be noted that a disproportionate percentage of cocktail sales are made in the off-season compared to other sources of major area off-season income. The value of food and beverage sales in the off-season is quite evident by the fact that the sum of restaurant, snack bar and cocktail income ($62,400) is equivalent to almost 60 percent of total off-season income excluding season pass sales.

4. Maine Ski Area Employment and Wages - Maine ski areas provide direct employment for 102 year-round, full-time and 738 seasonal plus part-time people as shown in Table VII-8.

Each major area employs an average of 8.7 full-time people and 32.4 part-time while regional areas, on the average, employs approximately one full-time person (probably the manager or the owner of the area) and 11.7 part-time people. Employment at local areas is only an average of three part-time people. Although the employment generated by the skiing industry

in Maine is relatively small compared to segments of the manufacturing industry for example, most ski areas in Maine are located in non-industrial areas that offer few alternative job opportunities. The ski areas, therefore, take on a more important role, for the employment opportunities are to a large extent, jobs that would not otherwise exist.

Table VII-8 EMPLOYMENT AND COST OF WAGES AT MAINE SKI AREAS

	Type of Area			
	Major	Regional	Local	Total
Employees (year-round, full-time)				
Number	89	13	0	102
Percent of total	87.3	12.7	0	100.0
Average per area	8.7	0.9	0	0.2
Employees (Seasonal plus part-time)				
Number	524	152	62	738
Percent of total	71.0	20.6	8.4	100.0
Average per area	52.4	11.7	3.0	16.4
Year-Round, Full-Time Wages				
Total dollars	$441,385	$ 65,912	0	$507,297
Percent of total	87.0	13.0	0	100.0
Average per employee	$ 4,959	$ 5,070	0	$ 4,974
Percent of total revenue	12.8	10.7	0	12.5
Seasonal plus Part-Time Wages				
Total dollars	$464,530	$145,644	$ 11,152	$621,326
Percent of total	74.9	23.4	1.7	100.0
Average per employee	$ 887	$ 958	$ 180	$ 842
Percent of total revenue	13.5	21.7	13.6	14.8
Total Wages				
Total dollars	$905,915	$211,556	$ 11,152	$1,128,628
Percent of total	80.3	18.7	1.0	100.0
Average per area	$ 90,592	$ 15,111	$ 531	$ 25,081
Percent of total revenue	26.3	31.5	13.6	26.9
Percent of total operating costs	42.7	38.3	29.6	42.2

Wages are traditionally a major cost of doing business and Table VII-8 shows that total wages (year-round, full-time plus seasonal or part-time) paid at Maine areas are approximately equal to 27 percent of total ski area income. This figure is slightly higher for regional areas compared to major areas, but at smaller areas, is equal to only 13.6 percent of total

revenues. The wages paid by major areas represents about 80 percent of the total statewide payroll of $1,128,623 paid in the 1970-71 season. The total wages paid by major areas were divided almost equally between full-time and part-time employees, namely $441,385 and $464,530, respectively. As one might expect, wages paid at regional and local areas consisted largely of those for seasonal plus part-time employees. In fact, no local ski area reported having year-round employees.

Wages represented a larger percent of operating costs at the major areas than at regional or local areas. For all areas collectively, wages represent 42 percent of total operating costs. This seems to indicate that as areas get larger, labor cost becomes a more important factor in operating the area. Many local areas rely on volunteer and part-time labor, while the major areas maintain crews permanently throughout the winter.

The seasonality of wages paid by major Maine ski areas is shown in Table VII-9. The skiing season was defined as the six-month period from November 1970, through April 1971. The off-season was from May 1970, through October 1970. The results show that approximately 88 percent of total wages were paid during the skiing season as defined above.

Table VII-9 SEASONALITY OF WAGES PAID BY MAJOR MAINE SKI AREAS

	Six Month Off-Season (May-Oct.)	Six Month Skiing Season (Nov.-April)	Year Total
Year-Round, Full-Time Wages			
Total dollars	$ 68,400	$373,000	$441,400
Percent of total	15.5	84.5	100.0
Seasonal plus Part-Time Wages			
Total dollars	$ 41,300	$423,200	$464,500
Percent of total	8.9	91.1	100.0
Total Wages			
Total dollars	$109,700	$796,200	$905,900
Percent of total	12.1	87.9	100.0

It is interesting to note that 84.5 percent of year-round, full-time wages were paid in one half of the year. One would expect the result to show half of these year-round wages to be paid in half the year. No explanation can be given for this discrepancy except that perhaps operators interpreted year-round to mean "permanent" full-time (i.e. including seasonal full-time) as contrasted to "temporary" seasonal help. With this reasoning, one can understand the assigning of some portion of seasonal wages under the year-round category. This supposition is supported to some extent, by the fact that total year-round wages paid as reported, divided by the total number of year-round employees as reported, yields an average annual wage per employee that is fairly reasonable. (See Table VII-8). In any event, the data is quite conclusive that wages paid by Maine ski areas are highly seasonal for the majority of employees.

5. Marketing Expenditures - The other cost area surveyed with the post season business questionnaire was marketing, which includes expenditures for advertising, promotion, public relations, brochures, shows, etc. The results presented in Table VII-10 show that major areas spent approximately $222,000 on marketing which represented about 90 percent of the statewide total. Major areas spent almost two thirds of their total marketing dollars out-of-state while the regional areas divided their costs approximately evenly between in-state and out-of-state efforts. The local areas that responded to this survey indicated that they spent all of their marketing expenditures within the State of Maine. On a total basis, marketing expenditures, by local areas, represented approximately one tenth of one percent of the total statewide total.

Marketing expenditures by major areas represented a larger percentage of total revenue than those of either the regional or local areas. Major areas spent 6.5 percent of their total revenues on marketing activities compared to 3.8 percent for regional areas and only 0.3 percent for local areas.

Table VII-10 COST OF MARKETING BY MAINE SKI AREAS, 1970-1971 SEASON

	Type of Area			
	Major	Regional	Local	Total
Out-of-State Marketing Expenditures				
Total dollars	$136,256	$ 12,980	0	$149,236
Percent of total	91.3	8.7	0	100.0
Average per area	$ 13,626	$ 927	0	$ 3,316
Percent of total revenue	4.0	1.9	0	3.6
In-State Marketing Expenditures				
Total dollars	$ 85,811	$ 12,241	$ 280	$ 98,332
Percent of total	87.3	12.4	0.3	100.0
Average per area	$ 8,581	$ 874	$ 13	$ 2,185
Percent of total revenue	2.5	1.8	0.3	2.3
Total Marketing Expenditures				
Total dollars	$222,067	$ 25,221	$ 280	$247,568
Percent of total	89.7	10.2	0.1	100.0
Average per area	$ 22,207	$ 1,801	$ 13	$ 5,502
Percent of total revenue	6.5	3.8	0.3	5.9
Percent of total operating costs	10.5	4.5	0.7	9.3
Distribution of Total Marketing Expenditures				
Percent of Total Spent Out-of-State	61.4	51.5	0	60.3
Percent of Total Spent In Maine	38.6	48.5	100.0	39.7
Total	100.0	100.0	100.0	100.0

The seasonality of marketing costs of major Maine ski areas is shown in Table VII-11. Only the major areas responded with enough data to permit this analysis. The results show that major areas spend more on marketing out-of-state during the off-season ($73,442) than any other category. Their expenditures in-state and out-of-state during the season were about the same, while in-state marketing during the off-season was lowest. Overall, out-of-state marketing is concentrated during the off-season and in-state, during the ski season.

This indicates that major areas believe that out-of-state advertising and promotion must begin earlier in the off-season to be effective in attracting skiers to Maine areas and in-state marketing for Maine people

is more effective during the skiing season.

Table VII-11 SEASONALITY OF MARKETING COSTS OF MAJOR MAINE SKI AREAS, 1970-1971 SEASON

	Six Month Off-Season (May-Oct.)	Six Month Skiing Season (Nov.-April)	Year Total
Out-of-State Marketing Expenditures			
Total dollars	$73,442	$ 62,814	$136,256
Percent of total	53.9	46.1	100.0
In-State Marketing Expenditures			
Total dollars	$23,512	$ 62,299	$ 85,811
Percent of total	27.4	72.6	100.0
Total Marketing Expenditures			
Total dollars	$96,954	$125,113	$222,067
Percent of total	43.7	56.3	100.0
Distribution of Total Marketing Expenditures			
Percent of Total Spent Out-of-State	75.7	50.2	61.4
Percent of Total Spent In Maine	24.3	49.8	38.6
Total	100.0	100.0	100.0

6. Profitability and Investment - Since previous experience has shown that owners and operators are somewhat reluctant to release information about profitability of their operations, this survey did not address this question directly. Instead, operators were asked only general questions about profit performance.

When asked to compare before tax profits of the completed 1970-1971 season with those of the previous season, 50 percent of the areas said that profits for the 1970-1971 season had been appreciably higher than those from the previous year. Thirty-one percent said that they were somewhat higher, and the remaining 19 percent reported profits to be about the same as the previous season. No ski area reported lower profits.

Areas were also asked to select from a list of eight possible reasons, the two they thought contributed the most to the increase in profitability

over the previous season. (See Question #5, Exhibit 5, Appendix A.) The results of their selection is shown in Table VII-12. Operators indicated that the length of the skiing season and weather conditions were the two most important factors affecting increased profitability. This reconfirms what has been referred to several times previously, namely, that the 1970-1971 season was a good one for skiing. It also demonstrates the importance of natural factors. The advent of technological breakthroughs such as grooming and snowmaking equipment has not lessened the importance of good weather for most of the areas.

Table VII-12 EXPRESSED REASONS FOR INCREASE IN PROFITABILITY OF MAINE SKI AREA OPERATIONS, 1970-1971 VERSUS 1969-1970

Expressed Reason	Percent of Total Responses
Length of skiing season	44.8
Weather conditions	24.2
Promotional effort	10.3
Facilities available	6.9
Cost control procedures	6.9
Change in our rates	6.9
Change in costs in general	0
Unusual one-time costs	0
Unusual one-time income	0
Off-season business	0
Total	100.0

Question #7 addressed the subject of cost items. Operators were asked to list the most critical cost item affecting the profitability of their ski operations. An overwhelming majority (78.7 percent) of those responding, listed labor costs as the most critical cost item affecting profitability. Results on this question correspond with figures from Table VII-8 which show that wages account for a major portion of total operating costs.

Finally, operators were asked to state the total gross fixed assets of their ski areas (i.e. the sum of the original undepreciated cost of those fixed assets such as land, buildings, lifts, equipment, parking, trails, roads, etc.). The results as shown in Table VII-13 indicate that the total gross fixed assets value of all Maine ski areas in 1970-1971 was approximately $11.2 million. As with other parameters, the major areas dominate, accounting for almost 80 percent of the statewide total. Regional areas with $2.1 million account for 18.8 percent and local areas with $205 thousand, account for 1.8 percent of the total. It is interesting to note that the percentage distribution of gross fixed assets as shown in Table VII-13 is almost the same as the distribution of income as shown previously in Table VII-4.

Table VII-13 GROSS FIXED ASSETS OF MAINE SKI AREAS

	Type of Area			
Assets	Major	Regional	Local	Total
Value	$8,875,500	$2,103,000	$205,800	$11,184,300
Percent of Total	79.4	18.8	1.8	100.0
Average per Area	$ 887,550	$ 150,214	$ 9,800	$ 248,540

The most common capital investment made prior to the 1970-1971 season was the addition of new lift facilities. Three major areas reported the installation of equipment to expand their lift capacity and several others reported the installation of snowmaking equipment for a total capital investment of over one million dollars at major ski areas. This was equivalent to an expansion of over 12 percent in capital assets. Improvements at regional areas were limited to the addition of trails and lighting facilities for night skiing.

Projected capital investment plans seem to center around improvement and addition of trails and the installation of new lifts, to service these new trails. Five major areas reported, for example, that they alone planned

to spend \$752,000 on improvements between May 1971 and April 1972. In addition, managers of areas reported planned expenditures of \$162,000 for the same period. The indications are then, that major and regional ski areas anticipate capital reinvestments to continue at the current levels.

VIII DISCUSSION OF RESULTS

A. The Analysis

This analysis was initiated because of the increasing need for data concerning one of the more rapidly growing sectors of Maine's vacation travel industry. Except for a few smaller studies conducted by individual ski areas and certain larger studies conducted on a national or regional scale, virtually no comprehensive data was available to identify the characteristics of the Maine skiing industry or its impact on the economy of the State.

It is recognized that the analysis presented in this report is limited in both scope and depth. Excluded for example, is an investigation of the interrelationships between seasonal homes and increased skiing activity and the role of the day skier and how he differs specifically from the overnight skier.

The basis for much of the analysis associated with ski area performance is the capacity of individual ski areas expressed simply as the maximum number of skiers that can be accommodated on a given day. A more accurate parameter would have been vertical transport feet per hour (VTF/HR) which is the product of the vertical ascent of a ski lift times the manufacturer's rated capacity (skiers per hour). Ski area capacity is the sum of VTF/HR computed for each lift. These calculations were not available on a statewide basis and thus, the simpler method was adopted.

Although the data collection effort was, to a large extent, a series of separate surveys, the methods used to gather information proved to be adequate for the purposes of this analysis.

B. Skiing

Skiing activity in Maine is only one fourth that of Vermont, namely, about 663,000 thousand skier days in Maine during the 1970-1971 season compared to 2,650,000 thousand in Vermont. In Maine, this represented an average of approximately 7,535 skiers per day throughout the length of the entire season. Although this figure may not appear significant at first glance, it is nevertheless equivalent to the combined populations of Bangor, Brewer and Orono going to the slopes once each week throughout the winter.

As part of this study, a one-day census was taken on January 30, 1971 which indicated a total skier attendance of approximately 16,600 in Maine on that day. This figure, for a Saturday in January, represents 31.5 percent of the average weekly attendance of 52,745 (i.e. 7535 x 7 days) and 2.5 percent of the yearly total of 663,100. These results correlate fairly well with those of Vermont which showed that the attendance in Vermont on that day was 22.1 percent of the weekly total and 1.6 of the season's total. Saturdays represent a higher percentage of totals in Maine than in Vermont because of the proportionately fewer number of mid-week and week-long skiers in Maine. The significance is simply to illustrate that skiing is not only an obvious seasonal activity, but also, that the rate of participation varies significantly during the week, more so than in Vermont.

The skier census data gathered on January 30, 1971 indicated that 17.1 percent of all skiers in Maine that day, were non-residents. The post season business survey, which provided data representing the entire season, showed that 28.6 percent of total revenue was generated by non-residents.

No data was available to determine precisely the percentage of total seasonal skier days represented by non-residents. Hypothesis based on the above data, plus evaluation of economic data discussed later in this chapter, leads to the estimate that non-residents represented 115,400 skier days in Maine during the 1970-1971 season or 17.4 percent of the

total of 663,100 skier days. Correspondingly, Maine residents represented 547,700 skier days or 82.6 percent of the total. These results are quite similar to those reported for the State of Colorado based on a recent report[1]. The results of this survey showed that 60.5 percent of total 1.14 million skier days in Colorado during the 1967-1968 season were due to Colorado residents. This is almost exactly opposite to the situation in Vermont where 79 percent of their total skier days during the 1970-1971 season were due to out-of-staters[2].

The most serious deficiency of this study is the lack of data to identify the split between day skiers and overnight skiers. Several casual methods and correlation techniques were employed to determine this split and all results indicate that overnight skiers (weekend plus vacation skiers) constitute between 15 and 20 percent of the total skier days in Maine.

Simply, for the sake of convenience for the economic analysis, it was assumed that the split was 17.4 percent overnighters and 82.6 percent day trippers, or the same split as for resident versus non-residents. Since the overnight skier survey indicated that a third of overnight skiers <u>were in fact</u> Maine residents, it means that approximately 88.4 percent of day trippers would have to be Maine residents for the above assumed 17.4/82.6 percent split to be true. The 88.4 percent figure seems quite logical and reasonable, therefore, relatively valid to assume that 17.4 percent of skier days were due to overnight skiers and 82.6 percent to day skiers.

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[1] <u>Colorado Ski and Winter Recreation Statistics, 1971</u>, Gerald L. Allen, Business Research Division, Graduate School of Business Administration, University of Colorado, Boulder, Colorado 80302

[2] <u>The Vermont Ski Industry, 1970-1971</u>, George A. Donavan, Chief of Research, Economic Development Division, Agency of Development and Community Affairs, Montpelier, Vermont

In skiing activity, the major ski areas in Maine capture the focus of attention. They account for 61.7 percent of the total season skier days in Maine and 81.4 percent of the non-resident skier days even though these ten areas had only slightly more than half of the statewide capacity.

C. <u>The Overnight Skier</u>

Two thirds of the overnight skiers in Maine are non-residents who travel an average of 385 miles one-way to reach their skiing destination for an average stay of 5.8 days. Half of the non-resident skiers come from Massachusetts. Approximately 90 percent of the non-resident skiers had skied the previous season. Of this total, approximately half had skied in Maine the previous year and, in fact, spent 40 percent of their 17.0 total skiing days on Maine slopes. To these non-resident overnight skiers, trail characteristics, size of mountain and good lodging facilities are respectively the three most important factors in choosing a ski area.

Maine residents, who are overnight skiers, travel a surprisingly long 165 miles one-way to reach their destination for an average stay of only 3.1 days which is almost half that of non-residents. As with non-residents, approximately 90 percent of Maine resident overnight skiers had skied the previous season. It is not surprising that of this total, 98 percent had skied in Maine the previous year and spent 98 percent of their 17.8 total skiing days in Maine. The same factors in the same order were most important to residents as well in choosing a ski area destination.

Both resident and non-resident overnight skiers are apt to be married males about twenty years old, who are employed and who received an annual income of just under $15 thousand.

The significance here is that except for obvious differences such as distance traveled and days spent in Maine, the non-resident and Maine resident overnight skier are very much alike and apparent skiers. In fact, the most striking finding here (and shown again later) is the absence of

any significant differences, particularly in income levels. Since the average per capita wage is approximately 25 percent lower in Maine than in Massachusetts, and since only about 29 percent of Maine households have annual cash incomes of over $10 thousand, the Maine resident overnight skier does not at all represent a cross-section of Maine's resident population, but rather, a small, relatively wealthy segment.

Since the ratio of non-residents to residents is only 2 to 1 for overnight skiers, it is relatively apparent that any efforts to increase the size of the overnight skier market must rely on an expansion of the non-resident trade since the large majority of low income Maine residents cannot afford the costs incurred by a Maine overnight skier.

D. Ski Area Operations

As this survey confirmed, Maine lags New Hampshire, Vermont and Massachusetts in ski area facilities. Although supporting data is not available, the indications are however, that the potential for increased growth is greater in Maine than in these three other states, simply because of the lower reference level. Massachusetts, for example, with generally lower vertical descents has over twice the number of lifts as does Maine.

As a business operation, the ten major ski areas representing less than one fourth of the total areas in Maine, substantially dominate over the regional and local areas. The major areas have over half of the total capacity, accounted for almost two thirds of the total statewide skier days and took in over four fifths of the total Maine ski area revenue of $4.2 million during the winter of 1970-1971.

The distribution of ski area revenue by source shows that ticket sales, daily plus seasonal, account for more revenues than all other sources combined. A most interesting finding however, is the relative role of ticket sales as a revenue generator at major and regional areas. Regional areas

depend upon ticket sales as a source of almost three fourths of their total revenues while, at major areas, it constitutes a little over half of area revenue.

It seems faily clear then, that Maine regional areas should seriously consider expanding and/or emphasizing the available services they offer in such areas as ski shop, rentals, lessons, cocktails and in particular, restaurant facilities in order to increase their total revenues. Conversely, because of limited potential demand, regional areas should not venture into overnight lodging facilities without conducting a careful market research analysis to confirm their status as an attraction for adequate non-resident trade or for volume resident trade at perhaps more modest rates.

The seasonality of ski area operations is obvious from the data which shows that 95 percent of major ski area revenue is received in the six month skiing season from November through April. Efforts to improve this imbalance, point again to the role of restaurant and cocktail sales. Contrary to what one might expect, chair lift ticket sales to summer and fall foliage tourists provided only 30.6 percent of total off-season revenue at major areas (excluding season ticket sales), while food and cocktail sales provided almost 59 percent. Major areas that do not have year-round restaurant facilities should give more thought to this alternative, particularly if their area is located near a tourist route or attraction or a summer outdoor recreation facility such as a State Park or private campground.

Based on reported data, revenue at Maine ski areas represent 37.5 percent of total gross fixed assets (GFA). This return correlates well with the results of a 1971 study for the National Ski Areas Association by Case and Company of New York which showed an average return of 33.4 percent for 415 ski areas in the United States. The rate of revenue return on GFA at major Maine areas was 38.8 percent compared to only 32 percent at regional areas and a rate of 38.0 percent at the small local areas.

Based on the above findings, it seems apparent that the expansion step from a local area to a regional area is more difficult than that from a regional to a major area.

This conclusion is also evident from an examination of ski area operating costs, particularly wages which represent 26.9 percent of total revenue on a statewide basis. This figure also correlates well with the aforementioned Case and Company study which showed labor costs representing 28.1 percent of total revenue at the 415 ski areas surveyed throughout the United States. In Maine, labor costs represent only 13.6 percent of revenue at local areas, a relatively large 31.5 percent at regional areas and a smaller 26.3 percent at major areas.

Knowing the percent of total operating costs represented by labor (See Table VII-8) it was possible to calculate total actual operating costs and then compare the results with revenues (See Table VII-4) to determine ski area operating profit (i.e. revenue minus direct and administrative costs as a percentage of revenue). The results that operating profit rates vary from a respectable 38.4 percent at major areas, to a low of only 17.9 percent at regional areas and back up to 51.5 percent at local areas operated to some extent by volunteer labor. Statewide, all Maine ski areas had a collective operating profit of 36.3 percent of total revenue. This compares with 25.4 percent reported by Case and Company, who found however, that 61 percent of Eastern areas were profitable as compared to only 35 and 39 percent of Rocky Mountain and Far West areas, respectively.

Although the data indicates that it is better to be big as far as the economics of ski area operations are concerned, all ski areas have certain common characteristics. These are: 1) a substantial capital investment in fixed equipment and facilities; 2) high fixed costs in relation to revenue (fixed costs include depreciation, maintenance, salaries of year-round employees, and overhead); and 3) low variable costs in relation to revenue. Because of these factors, less than half of all ski areas in

this country are consistent profit-makers.

However, Harrison A. Price, who is President of Economics Research Associates (a Los Angeles-based consulting firm) sums up the situation in the first issue of the Journal of Travel Research as follows:

"Profit opportunities in the ski resort business will continue to increase during this decade, with the bulk of future growth being absorbed through expansion of existing areas. And profitability is coming to depend more and more on dual-season operation and on revenues from sources other than skiing itself, making the many planning considerations ... of crucial importance."

E. Economic Impact

This survey measured both the spending characteristics of overnight skiers to identify the relative economic impact caused by skiers on a per person-per day basis, and the revenue characteristics of individual areas to identify the relative economic impact on a per area-per season basis.

With respect to the former, the results show that with respect to expenditures in Maine, the Maine resident as an overnight skier spends more than the non-resident overnight skier on mountain related items, area trip items and seasonal items. The total for these three categories is $38.17 per person per day for Maine residents as compared to $32.95 for non-residents. The weighted average for all overnight skiers is $33.81 per person per day.

Since the results of the surveys indicated that there were 663,100 skier days during the winter of 1970-1971 and that total revenues by all ski areas on mountain related items was approximately $4.19 million, it is then possible to calculate total expenditures by day skiers if one assumes some value for the split in day skiers versus overnight skiers.

Assuming that overnight skiers represent 17.4 percent or 115,400 skier days of the total 663,100 skier days (see previous discussion in Section B of this Chapter) then, their total expenditures for mountain related items at $33.81 per person per day would be $1.20 million for the season. To balance the total revenues of $4.19 million, the day skier correspondingly representing 82.6 percent of total skier days, would have to spend $5.46 per person per day to generate the difference of $2.99 million (i.e. 4.19 - 1.20 = 2.99).

To determine total area related expenditures and revenues, it is necessary to assume some value for daily expenditures by the day skier. The survey results showed that the overnight skier spent $17.89 per person per day on lodging, meals, transportation, entertainment, local businesses and other items. Of this total, $1.93 was spent on transportation and for purposes of this analysis, it is assumed that this is the only expenditure on area related items by the day skier. The results then are that the overnight skier generates $2.06 million in area revenue (i.e. $17.89 times 115,400 skier days) and the day skier another $1.06 million (i.e. $1.93 times 547,700 skier days) for a total of approximately $3.12 million in revenues for area related items during the winter of 1970-1971.

It should be noted at this point, that the above assumptions lead to an expenditure of $7.39 per person per day by day skiers on mountain plus area related items. In other words, this is the daily expenditure that would occur based on an assumed 17.4/82.6 percent split between overnight and day skiers, respectively. This figure compares favorably with the value of $7.00 per day spent in Vermont during the same 1970-1971 season by Vermont residents who are primarily day skiers who travel shorter distances to reach their ski areas.

For expenditures in Maine on seasonal items such as ski equipment and clothing, season passes, club dues, and other items, it was assumed that

the value of $5.54 per person per skiing day was the same for both overnight and day skiers. The results then, are that the overnight skier generates $0.68 million in statewide revenue (i.e. $5.54 times 115,400 skier days) and the day skier, another $3.06 million (i.e. $5.54 times 547,700 skier days) for a total of approximately $3.71 million in revenues in Maine for purchases of seasonal items during the winter of 1970-1971.

The above is summarized in Table VIII-1 below.

Table VIII-1 TOTAL REVENUE IN MAINE FROM SKIING DURING THE 1970-1971 SEASON

	Millions of Dollars			
	Day Skier	Overnight Skier	Total	Percent
Mountain Related Items	$2.99	$1.20	$ 4.19	38.0
Area Related Items	1.06	2.06	3.12	28.3
Seasonal Items	3.03	0.68	3.71	33.7
Total	$7.08	$3.94	$11.02	100.0

The results indicate that skiing represented an $11 million dollar business in the State of Maine during the winter of 1970-1971. It is also most interesting to note that expenditures at the ski areas, themselves, on mountain related items, represented only 38 percent of statewide revenues. Stated in another manner, this means that for every $1.00 spent on the mountain, another $1.62 is spent by skiers in the area and throughout the State.

The post season business survey indicated that expenditures on mountain related items alone, provided 102 year-round, full-time jobs plus another 738 seasonal plus part-time jobs. The total payroll of approximately $1.13 million represented 26.9 percent of total mountain revenue. It is quite likely that in the more labor intensive (less capital inten-

sive) business which are the recipients of expenditures on area and seasonal items, labor costs would be greater than the 26.9 percent at ski areas. Marion Clawson and Jack Knetsch[1] estimate that tourists, in general, generate $0.35 in direct and indirect wages for each dollar of expenditure. This, then indicates that skiing in Maine provided $3.86 million in wages throughout the State during the winter of 1970-1971.

[1] Economics of Outdoor Recreation, Resources for the Future, 1966

APPENDIX A

MAINE DEPARTMENT OF ECONOMIC DEVELOPMENT SKI SURVEY

SKI AREA FACILITIES QUESTIONNAIRE

Exhibit A-1

Official name of skiing area ______________________

City or Town ______________

Road or Route No. ______________

Telephone No. ______________

Name of General Manager ______________

Mailing Address ______________

____

Telephone No. ______________

Chair Lifts, Double (Length of each in feet) ______ ______

______ ______

Chair Lifts, Single (Length of each in feet) ______ ______

T-Bar Lifts (Length of each in feet) ______ ______

______ ______

______ ______

Poma Lifts (Length of each in feet) ______ ______

Rope Tows (Length of each in feet) ______ ______

______ ______

Other Type Lifts (Type and Length of each) ______ ______

Open Slopes (Number, total acreage, skill range) ____ ____ ____

Expert Trails (Number, total length in miles) ____ ____

Intermediate Trails (Number, total length in miles) ____ ____

Novice Trails (Number, total length in miles) ____ ____

Maximum Vertical Descent (feet) ______

Cross Country Trails (Number, total length in miles) ____ ____

Ski Jumps (Number, height of each in meters) ____ ____ ____ ____

Facilities and services available <u>on site</u>:

	Yes	No		Yes	No
Base Lodge	___	___	Snow Making Equipment	___	___
Restaurant	___	___	Night Skiing	___	___
Snack Bar	___	___	Nursery	___	___
Ski Shop	___	___	Snowmobiling	___	___
Equipment Rentals	___	___	Ice Skating	___	___
Equipment Repairs	___	___	Tobogganing	___	___
Skiing Instruction	___	___	Snowshoeing	___	___
Ski Patrol	___	___	Open Daily	___	___

Other significant or noteworthy features: ______________________

____

____

Capacity (Maximum number of skiers that can be accommodated on any one day)

____

Comments: ______________________________________

____

____

____

Exhibit A-2

1970 BOSTON SKI SHOW SURVEY

MAINE DEPARTMENT OF ECONOMIC DEVELOPMENT SKI SURVEY

1. Did you ski at least one time last winter?
   Yes ___ How many total days? ___
   No ___ If No, skip to Question 3.

2. Did you ski in Maine last winter?
   Yes ___ How many total days? ___
   No ___ Why not? ________________________________

3. Do you plan to ski in Maine this winter?
   Yes ___ How many total days? ___
   Maybe ___ Depends on what? ____________________________
   No ___ Why not? ________________________________

4. Of the following items, which three are most important to you in choosing a place to go for a skiing weekend or vacation, assuming good snow and weather? (Mark most important as 1, second most important as 2, and third as 3.)

   Local shops and services ___
   Ski school ___
   Condition of road to area ___
   Size of mountain ___
   Equipment rentals ___
   Trail characteristics ___
   Other outdoor activities ___
   Type of lift equipment ___
   Good restaurants ___
   Distance from home ___
   Social and night life ___
   Good lodging facilities ___

5. Had you seen any SKI ME. advertising before coming to this show? Yes___ No___

6. In what state do you live? ____________ What is your age? ___

— HELP Me. —

Exhibit A-3

Will you help The Great State of Maine by taking just a moment to answer a few questions?

We, at the Maine Department of Economic Development, are trying to make Maine an even better place to visit but to do this, we would like to learn more about you. Knowing what is important to you is important to us.

The following questions apply to you alone as an individual, not as a member of a group or family. We do not ask for your name, just that you try to do the best you can.

Please deposit the completed form with your innkeeper at your convenience.

1. To what magazines do you currently subscribe? ______________________________

2. Had you seen any SKI ME. advertising before coming here on this trip?
   Yes ___ Where? ______________________________
   No ___

3. Do you currently have a valid season's pass to any ski area?
   Yes ___ Area and cost? ______________________________
   No ___

4. Did you attend the Boston Ski Show in October, 1970?
   Yes ___ Did you fill out a questionnaire at the Maine booth? ________
   No ___ Which ski show, if any, did you attend? ________

5. In what state and county are you currently residing? State: ________
   County: ________

6. How many miles did you travel to come skiing here on this trip? ________

7. Did you ski at least one time last winter?
   Yes ___ How many estimated total days? ________
   No ___ If No, skip to Question 9.

8. Did you ski in Maine last winter?
   Yes ___ How many estimated total days? ________
   No ___ Why not? ______________________________

9. Of the following items, which three are most important to you in choosing a place to go for a skiing weekend or vacation, assuming good snow and weather?

   Local shops and services ___
   Ski School ___
   Condition of road to area ___
   Size of mountain ___
   Equipment rentals ___
   Trail characteristics ___
   Other outdoor activities ___
   Type of lift equipment ___
   Good restaurants ___
   Distance from home ___
   Social and night life ___
   Good lodging facilities ___

10. How many estimated total days will you ski during this entire winter? ________

11. Of this total number, how many will be in Maine? ________

-continued other side-

We are interested in the per person cost of skiing. In the following questions please put down only your individual share of the costs (even if someone else is paying the bills).

12. How many days will you ski here at this area on this trip? ______

13. During this number of days what is the total amount that will be spent for each of the following mountain related items, as they apply to you alone?

Lift tickets	$______	Equipment rentals	$______
Snack bar	$______	Ski shop purchases	$______
Lessons	$______	Other	$______

14. In addition to the above, how much will be spent in Maine during this trip to this area for each of the following non-mountain related items, as they apply to you alone?

Lodging	$______	Transportation	$______
Meals	$______	Local Businesses	$______
Entertainment	$______	Other	$______

15. Finally, in addition to both of the above types of expenses, how much will be spent this winter for each of the following seasonal items not related to any specific ski trips, as they apply to you alone?

	Spent Within the State of Maine	Spent Outside the State of Maine
Skiing equipment and accessories	$__________	$__________
Ski and apres ski clothing	$__________	$__________
Seasonal lift tickets	$__________	$__________
Club and association dues	$__________	$__________
Other__________	$__________	$__________

16. Please indicate the following to help us classify your answers:

   a. Male ___ or Female ___

   b. Single___ or Married___

   c. Age ___

17. Please check one or more of the following:

   a. Student ___ Where?__________

   b. Housewife ___ Number of children ___

   c. Unemployed ___ Comment?__________

   d. Employed ___ Indicate range of total annual household income:

Under $5,000	___	$10,000 - 15,000	___
$5,000 - 9,999	___	Over $15,000	___

18. Do you have any comments concerning this ski area or this survey? ______

____

____

____

____

____

MAINE DEPARTMENT OF ECONOMIC DEVELOPMENT SKI SURVEY

SKIING CENSUS REPORT

Exhibit A-4

Date of Census:

Name of ski area: ______________________________

Report prepared by: Name ______________________________

Title ______________________ Tel. No. __________

1. What were your hours of operation on the date of census? __________

2. What were your skiing conditions on the date of census?

___ Excellent
___ Good to Excellent
___ Good
___ Fair to Good
___ Fair
___ Poor to Fair
___ Poor

3. What were your weather conditions on the date of census?

___ Clear
___ Scattered Clouds
___ Partly Cloudy
___ Overcast
___ Rain
___ Sleet
___ Snow

4. How many people skied at your area on the date of census? __________

5. What percent of this total number of skiers, do you estimate, were out-of-state residents? __________

6. How did you determine this total attendance figure?

___ General estimate based on past experience
___ Ticket sales count plus estimate of season pass holders
___ Number of vehicles times an average number of passengers
___ Actual head count
___ Other (Explain:______________________________)

7. How does this total attendance figure compare with what you expected for this date this year with excellent skiing and clear weather?

___ Higher than expected (By how much? ______________)
___ About as expected
___ Lower than expected (By how much? ______________)

8. How many buses were in your parking lot at 2 PM on the date of census? ________

9. How many cars were in your parking lot at 2 PM on the date of census? ________

Number of cars with Maine license plates ________
Number of cars with out-of-state plates ________

10. How many out-of-state cars were there from each of the following?

Massachusetts____
Connecticut ____
Rhode Island ____

New Hampshire____
Vermont ____
New York ____
Other U.S.A. ____

New Brunswick____
Nova Scotia ____
Quebec ____
Other Canada ____

Please return to: Alvar K. Laiho
Maine Department of Economic Development
Amherst Street
Augusta, Maine 04330

MAINE DEPARTMENT OF ECONOMIC DEVELOPMENT SKI SURVEY
POST SEASON BUSINESS QUESTIONNAIRE

May 1971

Ski Area:

Please try to answer the following questions as best as you can and as accurately as possible. If you do not know the exact answer to a question, please put down a reasonable estimate.

Remember that all information is coded, will be kept in strict confidence and used only to prepare statewide totals.

1. Please indicate the following related to your operations for the 12 month periods starting May 1 and ending April 30.

		This Year May 70-Apr 71	Last Year May 69-Apr 70
a. Employees (year round full time)	Number	______	______
	Ave. Wage	______	______
b. Employees (seasonal plus part time)	Number	______	______
	Ave. Wage	______	______
c. Number of season ski passes sold		______	______
d. Number of ski package plans sold		______	______
e. Number of people who purchased skiing lessons		______	______
f. Number of operating days	(skiing only)	______	______
g. Number of operating days	(12 month total)	______	______
h. Lift tickets sold	(skiers only)	______	______
i. Lift tickets sold	(12 month total)	______	______
j. Estimated skier attendance	(total skier days)	______	______

2. What income did your area receive this year from each of the following categories for the time periods indicated? (If licensees or lessees are involved, then show their actual sales and not their fees to you.)

	Six Month Off-Season May 70-Oct 70	Six Month Skiing Season Nov 70-Apr 71	Total For The Year May 70-Apr 71
a. Season passes	$______	$______	$______
b. Package plans	______	______	______
c. Daily lift tickets	______	______	______
d. Skiing lessons	______	______	______
e. Ski rentals	______	______	______
f. Ski shop	______	______	______
g. Snack bar	______	______	______
h. Restaurant	______	______	______
i. Cocktails	______	______	______
j. Other ______	______	______	______
k. Total Gross Income (This year)	$______	$______	$______
m. Total Gross Income (Last year)	$______	$______	$______

3. What percent of your ski areas total gross income, do you estimate, was due to out-of-state visitors?
   a. This year (% of 2k above) ______
   b. Last year (% of 2m above) ______

4. What were your area's <u>costs</u> this year for each of the following categories for the same time periods.

	Six Month Off-Season May 70-Oct 70	Six Month Skiing Season Nov 70-Apr 71	Total for This Year May 70-Apr 71
a. Salary and wages (year round full time)	$________	$________	$________
b. Salary and wages (seasonal plus part time)	________	________	________
c. Marketing (out-of-state)	________	________	________
d. Marketing (within Maine)	________	________	________

(Note: marketing includes advertising, promotion, public relations, brochures, shows, etc.)

5. How do your area's before tax <u>profits</u> this year (May 70-Apr 71) compare to those of last year (May 69-Apr 70)?

a. Appreciably higher ____
b. Somewhat higher ____
c. About the same ____
d. Somewhat lower ____
e. Appreciably lower ____

6. What are the <u>two</u> main reasons for this change, if any in your profitability? (Mark the primary reason as _1_ and the secondary reason as _2_)

a. Length of skiing season ____
b. Facilities available ____
c. Cost control procedures ____
d. Change in our rates ____
e. Change in costs in general ____
f. Unusual one-time costs ____
g. Unusual one-time income ____
h. Weather conditions ____
i. Promotional effort ____
j. Off-season business ____

Explain:________________________________

____

7. What is the single most critical <u>cost item</u> effecting the profitability of your ski area operations?____________________

8. What <u>percent</u> of your total <u>operating costs</u> (i.e., sum of salary and wages, marketing, operations and administration) does salary and wages represent? ________%

9. What are the total gross fixed assets of your ski area? (Total gross fixed assets is the sum of the original undepreciated cost of those fixed assets such as land, buildings, lifts, equipment, parking, trails, roads, etc. which were used to generate the income shown in Question 2.) $________

10. What new facilities, services, or improvements did your ski area offer this year that were not available last year?

a. Description ____________________________

____

b. Total capital investment committed to these additions? $________

11. What new facilities, services or improvements do you plan to add for the coming year (May 71-Apr 72)?

a. Description ____________________________

____

b. Total capital investment to be committed to these additions? $________